

DELPHI

August 3, 2007

Carol Ropski
U.S. EPA Region 5
Emergency Enforcement Services Section SE-5J
77 West Jackson Blvd.
Chicago, IL 60604-3590

Re: Delphi Home Avenue Plant Site, (B5KG), Dayton, OH

Dear Ms. Ropski:

This responds to the U.S. EPA's CERCLA General Notice Letter regarding the above site ("the Site") dated July 25, 2007 and received by Delphi on July 30, 2007 ("the Notice Letter"). This response is timely submitted within the 7 days requested by the U.S. EPA ("the Agency") in the Notice Letter.

Delphi is willing to perform the activities requested in the Notice Letter subject to negotiation of an acceptable administrative order and associated scope of work governing that work and resolving other Agency Site related claims. As we have discussed, Delphi would like to meet with the Agency's team for this matter to discuss the administrative order and scope of work as soon as such a meeting can be arranged.

As you are aware, Delphi has been conducting investigation and remediation of VOCs at this facility since 2003. This work has included multiple phases of onsite and offsite characterization in cooperation with Ohio EPA and the Montgomery County Health Department. In addition, a soil vapor extraction system has been installed to remove VOCs from soil. Delphi looks forward to working with the Agency to complete that investigation in order to protect human health and the environment at the Site. Delphi is developing a work plan for taking appropriate mitigation steps and implementing extended monitoring, where U. S. EPA screening criteria are exceeded. Delphi will provide a copy of the draft work plan before the meeting with the Agency.

Please address all future correspondence or contacts regarding this matter to:

James Hunt
Manager, Global Remediation Services (GRS)
Operations Support Group (OSG)
Delphi Corporation, World Headquarters and Customer Center
5825 Delphi Drive, Mail Code: 480-410-186,
Troy, Michigan USA 48098
Phone: +1 248.813.1428, Fax +1 248.813.1433
Mobile: +1 248.953.1173, james.hunt@delphi.com

DELPHI

October 15, 2007

Federal Express Delivery

Steve Renninger, On-Scene Coordinator
U.S. EPA Command Post
4909 Charlemar Drive
Cincinnati, Ohio 45227

Re: Request for Approval of Phase I Work Plan, Project Coordinator and Project Contractor
Delphi VOC Plume Site
Dayton, OH

Dear Mr. Renninger:

In anticipation of the execution of an Administrative Settlement Agreement and Order on Consent for Removal Action ("Order") at the Delphi VOC Plume Site ("Site") and in accordance with Section VII of the draft Order, Delphi, with the assistance of its contractor, Haley & Aldrich, Inc., has prepared the enclosed Phase I Work Plan for Indoor Air Sampling and Mitigation.

Delphi is requesting your approval of the enclosed Phase I Work Plan, as well as the Project Coordinator and Project Consultant.

I have been designated by Delphi to serve as Project Coordinator for this Work. My contact information is:

W. John Ridd, Project Manager
Delphi Corporation
MC 4-03
2000 Forrer Boulevard
Dayton, OH 45420
Telephone: 937.455.0941
Mobile phone: 937.901.3755

I am a Senior Environmental Project Engineer in the Delphi Corporate Remediation Group and a Registered Professional Engineer in Ohio, with a B.S. in Mechanical Engineering and an M.S. in Engineering, Civil Environmental from Purdue University. I have more than 31 years of experience working on environmental issues at industrial sites, working fulltime on Delphi remediation projects for the past 9 years.

As you know, we have retained Haley & Aldrich, Inc. as our primary environmental consultant for investigation and mitigation activities at the Site and will continue with that relationship in our ongoing work under the Order. Haley & Aldrich has been provided a copy of the Order and understands the requirements of the Order. Haley & Aldrich's Quality Management Plan ("QMP"), dated June 2003, has previously been approved by U.S. EPA Region 5.

We look forward to working with you on this project. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "W. John Ridd". The signature is fluid and cursive, with the first name "W. John" and the last name "Ridd" clearly distinguishable.

W. John Ridd
Project Manager
Delphi

c: Susan Hoertt, Haley & Aldrich

DELPHI

November 2, 2007

Federal Express Delivery

Steve Renninger, On-Scene Coordinator
U.S. EPA Command Post
4909 Charlemar Drive
Cincinnati, Ohio 45227

Re: Request for Approval

Dear Mr. Renninger:

In accordance with Section VII of the Administrative Order on Consent for the Delphi VOC Plume Site, Delphi is requesting your approval of the following with regard to this project:

- Phase I Work Plan;
- Project Coordinator;
- Project Consultant; and
- Project Subconsultants.

Phase I Work Plan for Indoor Air Sampling and Mitigation

Delphi, with the assistance of its contractor, Haley & Aldrich, Inc., has prepared the enclosed Phase I Work Plan for Indoor Air Sampling and Mitigation. Pursuant to your request, one hard copy and one disc copy of the Phase I Work Plan are enclosed.

Project Coordinator

I have been designated by Delphi to serve as Project Coordinator for this Work. My contact information is:

W. John Ridd, Project Manager
Delphi Corporation
MC 4-03
2000 Forrer Boulevard
Dayton, OH 45420
Telephone: 937.455.0941
Mobile phone: 937.901.3755

I am a Senior Environmental Project Engineer in the Delphi Corporate Remediation Group. I am a Registered Professional Engineer in Ohio and a Certified Hazardous Materials Manager (CHMM). I have a B.S. in Mechanical Engineering and an M.S. in Engineering (Civil Environmental) from Purdue University. I have more than 31 years of experience working on environmental issues at industrial sites, and have been responsible for management of Delphi remediation projects for the past 9 years.

Project Consultant

As you know, we have retained Haley & Aldrich, Inc. as our primary environmental consultant for investigation and mitigation activities at the Site and will continue with that relationship in our ongoing work under the Order. Haley & Aldrich has been provided a copy of the Order and understands the requirements of the Order. Haley & Aldrich's Quality Management Plan ("QMP"), dated June 2003, has previously been approved by U.S. EPA Region 5.

Project Subconsultants

Haley & Aldrich has contracted the services of Columbia Analytical Services Inc., Air Quality Laboratory of Simi Valley, California ("CAS") to provide the sampling equipment and laboratory analytical services for the Phase I sampling and mitigation monitoring program. CAS is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory. The Statement of Qualifications for CAS is enclosed.

Haley & Aldrich has contracted A to Z Radon Services of Hartville, Ohio to provide mitigation system design and installation services for the Phase I mitigation program. A to Z is licensed by the State of Ohio Department of Health Division of Quality Assurance Radon Program. A to Z's qualification letter and a copy of their license are enclosed.

We look forward to working with you on this project. If you have any questions, please contact me.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosures

c: Susan Hoertt, Haley & Aldrich, Inc.
Randy Kirkland, Weston Solutions

State of Ohio
Department of Health
Division of Quality Assurance - Radon Program

Radon Mitigation Specialist

James M McDonald
A-Z Radon Services
11377 Miller Ave., NE
Hartsville OH 44632

License Number Expiration Date
RS51 10/20/2009

This license is issued pursuant to Chapter 3723 of the Ohio
Revised Code and 3701-69 of the Ohio Administrative Code



License Card is not
valid if altered



Jim McDonald
President

Office: 330.877.5515

800.86.RADON

Fax: 330.877.8912

11377 Miller Ave. NE
Hartville, OH 44632

www.azradon.com
azradon@neo.rr.com

- A-Z Radon Services has been a licensed radon contractor in Ohio for over 14 years.
- We have installed over 4,000 “sub-slab depressurization systems” in the state of Ohio.
- Jim McDonald has been a presenter for the EPA on Sub-Slab Depressurization Systems.
- Jim has been a speaker for the Conference of Radiation Control Program Directors, Inc (CRCPD).
- Jim has been a consultant for Northeast Ohio EPA, Ohio Bureau of Mines, Carroll, Tuscarawas and Stark County Health Departments and Canton City Health Department.
- Jim and Tony have completed all required courses for sub-slab depressurization installs and all continuing education courses that are required, including one on ASTM E2121-03.

References:

Josh Kerber
Ohio Department of Health

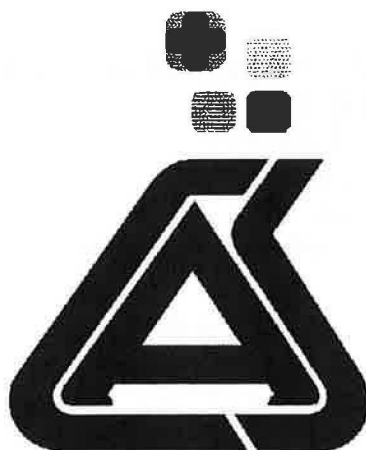
Marybeth Rich
Ohio Department of Health

Vanessa Stigerwald Dick
Northeast Ohio EPA



Saving Lives Since 1993

Statement of Qualifications



Columbia Analytical Services, Inc. *Air Quality Laboratory*

2665 Park Center Drive, Suite D
Simi Valley, California 93065

805-526-7161 (Phone)
805-526-7270 (Fax)

NELAC ACCREDITED
EPA Lab Code: CA00404

AIHA ACCREDITED
Lab # 101661

Committed to Providing Scientifically Sound, Legally Defensible Air Quality Data!

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♦ ***MASS SPECTROMETRY INTERPRETATION***

The laboratory staff is particularly qualified in the area of interpretive mass spectrometry with over seventy-five years combined experience in the operation of gas chromatographs and mass spectrometers. CAS/AQL has been involved in the refinement of a number of methods involving thermal desorption and cryogenic concentration with an emphasis on the development of techniques to analyze difficult and non-routine compounds at extremely low concentrations.

♦ ***METHOD DEVELOPMENT***

As a complement to the laboratory services and capabilities, we offer broad-based experience in the area of method development and validation. CAS/AQL has performed a full-scale validation of the microbial volatile organic compounds (MVOCs) method and EPA Method TO-17.

♦ ***PRODUCT EVALUATIONS***

CAS/AQL has been involved in many unique projects to evaluate a wide range of products. For example, the laboratory performs material emission/off-gassing studies on a regular basis. Another project involved the evaluation of the performance of residential air purification devices.

♦ ***SAMPLING, DATA INTERPRETATION, AND OTHER TECHNICAL SUPPORT***

For each project, a member of the project management team will discuss the data quality objectives with the client to determine the best sampling and analytical approach. In addition to performing standard agency methodologies, CAS/AQL is able to assist in the development of customized protocols to meet the unique project needs of the client. The chemistry expertise and analytical skills of the scientists are utilized to solve problems and to ensure that the project's data quality objectives are met in the most cost-effective manner.

♦ ***RANGE OF METHODS***

The lab has demonstrated expertise in a wide variety of testing methodologies, including EPA, NIOSH, OSHA, ASTM, and NCASI methods.

♦ ***ACCREDITATION***

CAS/AQL is certified in New York, Arizona and California. The laboratory is accredited under the National Environmental Laboratory Accreditation Program (NELAP). In addition, CAS/AQL is accredited by the American Industrial Hygiene Association (AIHA) for organic solvents and participates in this organization's quarterly Proficiency Analytical Testing (PAT) Program.

3.0 Analytical Capabilities & Services

ANALYTICAL CAPABILITIES

Gas Chromatography/Mass Spectrometry	Methods
Polynuclear Aromatic Hydrocarbons, PUF/XAD-2 (high volume)	EPA TO-13A
Polynuclear Aromatic Hydrocarbons, PUF/XAD-2 (low volume)	EPA TO-13A (modified)
Semivolatile organic compounds, Mod. Method 5 sample train	EPA 0010/8270C
Volatile organic compounds, passivated Summa canister	EPA TO-14A/IP-1A
Volatile organic compounds, passivated Summa canister	EPA TO-15/IP-1A
Volatile organic compounds, Tedlar® bag	EPA TO-14A (modified)
Volatile organic compounds, multisorbent tube	EPA TO-15 (modified)
Volatile organic compounds, multisorbent tube	EPA TO-17
Air-phase petroleum hydrocarbons (APHs)	State of Massachusetts DEP
Tentatively identified compounds (mass spectral library search)	—

Gas Chromatography	
Benzene, Toluene, Ethylbenzene, Xylenes and Methyl tertiary-Butyl Ether (BTEX/MTBE), GC/PID	CARB 410 (modified)
BTU heat content	ASTM D3588-98
Carbon speciation (C ₁ -C ₆ , C ₆ ⁺), GC/FID	TO-3 (modified)
Hydrogen Sulfide, GC/FPD	
Reduced Sulfur compounds (speciated), GC/FPD	ASTM D6628-98 (mod)
Hydrogen Sulfide, GC/SCD	ASTM D5504-01/
Reduced Sulfur compounds (speciated), GC/SCD	SCAQMD 307.91 (mod)
Methanol (duplicate injections)	EPA 308 (modified)
Nitrogen (single injection)	EPA 3C (modified)
(duplicate injection)	EPA 3C
Organochlorine pesticides, GC/ECD (high volume)	EPA TO-4A
(low volume)	TO-10A
Permanent gases (H ₂ , CO, CO ₂ , N ₂ , O ₂ , CH ₄)	ASTM D1946-98
	EPA 3C (modified)
Polychlorinated biphenyls (PCBs), GC/ECD (high volume)	EPA TO-4A
(low volume)	TO-10A
Sulfur Hexafluoride (SF ₆), GC/ECD	NIOSH 6602

INDOOR AIR QUALITY

Acrolein by GC/MS	EPA TO-15
Air-phase Petroleum Hydrocarbons (APH) by GC/MS	State of Mass DEP
Aldehydes	EPA TO-11A
Formaldehyde	
& 12 other aldehydes	
Carbon dioxide	EPA 25C (modified)
Carbon monoxide	
Carbon dioxide & Carbon monoxide	
Diesel	NIOSH 1550 (modified)
Environmental tobacco smoke – solanesol	ASTM D6271
Hydrocarbon speciation	
Methane	TO-3 (modified)
C ₁ -C ₆ , C ₆ ⁺ (e.g. natural gas)	
Hydrogen sulfide	
& 19 other reduced sulfur compounds	ASTM D5504 (modified)
Methanol	NIOSH 2000
Microbial Volatile Organic Compounds	NIOSH 2549 (modified)
Naphthas: Kerosene, Mineral Spirits, Stoddard	
Solvent or, VMP Naphtha	NIOSH 1550
PAHs (16) by GC/MS (low volume)	TO-13A (modified)
	NIOSH 5515 (modified)
Pesticides (organochlorine)	TO-10A
PCBs by GC/ECD	TO-10A
	NIOSH 5503
Pesticides (organochlorine) & PCBs	TO-10A
Phenol & cresol	OSHA 32
Solvents	NIOSH/OSHA
Sulfur Hexafluoride (SF ₆)	NIOSH 6602
Total Petroleum Hydrocarbons (TPH) as	
Diesel	NIOSH 1550 (modified)
Gasoline	EPA TO-3
Unknown VOC identification by GC/MS library search (TICs)	TO-15 (modified)
Volatile Organic Compounds by GC/MS	
Canister	EPA TO-14A/TO-15
43 compounds	
68 compounds	
43 plus TICs	
TVOC as toluene	
Thermal desorption	EPA TO-17

4.0 Facilities, Instrumentation & Personnel

CAS/AQL ANALYTICAL LABORATORY

CAS/AQL maintains 10,000 square feet of laboratory and office space in Simi Valley, California. The space is divided into an instrumentation laboratory, a semi-volatiles analysis laboratory, a preparation laboratory, a canister-conditioning laboratory, a sample receiving/sample storage area and office areas. The entire unit is maintained with a security alarm system, high volume air conditioning and sufficient power for all analytical instrumentation.

Carrier, make-up, purge and detector gases are supplied to the laboratory instruments via a gas delivery system located in the warehouse portion of the facility. The gas delivery system is comprised of four two-cylinder manifolds, which allow tanks to be changed without interruption to the gas supply. Gas purification devices and indicator tubes are housed in an enclosure located in close proximity to the instruments.

CAS/AQL SATELLITE EXTRACTION FACILITY

CAS/AQL maintains a satellite extraction facility located 18 miles from the analytical lab in Canoga Park, CA. The 1300-square foot unit contains three eight-foot fume hoods and a three-ton air conditioning unit. The facility is designed with the expressed purpose of performing semi-volatile organics extraction of air, liquid and solid matrices. The extraction facility is equipped with approximately sixty-five linear feet of bench space, glassware washing equipment and materials, flammable solvent storage, standard and sample/extract storage, thermal control units and an electric kiln.

VOLATILES LABORATORY – GC/MS

Gas Chromatograph/Mass Spectrometer/Data Systems

- ♦ HP Model 5973 quadrupole mass selective detector equipped with an HP 6890 gas chromatograph, Enviroquant Chemstation data system, and a 98,000-compound NIST spectral library (3)
- ♦ HP Model 5972 quadrupole mass selective detector equipped with an HP 5890 Series II gas chromatograph, Enviroquant Chemstation data system, and a 98,000-compound NIST spectral library
- ♦ HP Model 5970B quadrupole mass selective detector equipped with an HP 5890A gas chromatograph, Enviroquant Chemstation data system and a 98,000-compound NIST spectral library
- ♦ HP Model 5890 GC equipped with an FID and Enviroquant software for screening source level samples
- ♦ Varian Model 3400, for screening source level samples (2)

Purge and trap concentrators / autosamplers

- ♦ Tekmar Model LSC-2000 purge and trap concentrator
- ♦ Tekmar Model 2016, 16-Position autosampler equipped with soils heater
- ♦ Tekmar Model 2032 16-Position autosampler equipped with soils heater

Automated whole air inlet system

- ♦ Tekmar AutoCan automated concentrator. PC-controlled inlet system is capable of analyzing up to sixteen passivated stainless steel canisters or Tedlar bags with unattended operation. Concentrator unit is equipped cryofocusing module and solid sorbent trapping module.

Thermal desorber / cryogenic concentrators

- ♦ Perkin-Elmer TurboMatrix ATD-50 automatic desorber

<i>SAMPLE MANAGEMENT AND DISPOSAL</i>
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Air sampling containers / flow controllers
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- | |
|--|
| <ul style="list-style-type: none">♦ Six-liter Summa passivated stainless steel canisters (975)♦ Six-liter Silco passivated stainless steel canisters (12)♦ Three-liter Silco passivated stainless steel canisters (8)♦ Meriter 2.4-liter passivated stainless steel canisters (27)♦ Low volume flow controllers for time integrated sampling (125) |
|--|

Automated Summa canister conditioning units

- | |
|--|
| <ul style="list-style-type: none">♦ Ten-position, microprocessor controlled conditioners with heater controller, Pirani vacuum gauge, nitrogen fill capability and large capacity vacuum pump (2)♦ Fourteen-position, microprocessor controlled conditioners with heater controller, Pirani vacuum gauge, nitrogen fill capability and large capacity vacuum pump (1) |
|--|

<i>INFORMATION TECHNOLOGY</i>

Network Server

- | |
|--|
| <ul style="list-style-type: none">♦ Hewlett-Packard NetServer LH III with Windows 2000 |
|--|

Uninterruptible Power Supply

- | |
|--|
| <ul style="list-style-type: none">♦ APC Smart UPS Model SU2200NET uninterruptible power supply dedicated to the network and mail servers |
|--|

Summary of Key Personnel

Personnel	Years of Experience	Project Role
Michael Taday, BS	22	Director, Research and Development
John G. Yokoyama, BS	16	Laboratory Operations Manager
Lynne Fulks, BS	11	Quality Assurance Program Manager
Kathleen Aguilera, BA	13	Project Manager
Ku-Jih Chen, BS	27	Principal Chemist
Christopher J. Parnell, BS	15	Senior Chemist
Wade Henton, BS	16	Senior Chemist
Jeanette Campbell, MSc(A) Certified Industrial Hygienist	15	Special Projects Corporate EH&S Program Director
Nelyn Quitoviera, BS, MS	17	Analytical Chemist
Madeleine Dangazyan, BS	7	Analytical Chemist, EH&S Coordinator
Michelle Sakamoto, BA	6	Analytical Chemist
Annie Calvagna, BS	6	Analytical Chemist
Regan Lau, BS	5	Analytical Chemist
Svetlana Walsh, BS	4	Analytical Chemist
Christy Saint, BS	2	Analytical Chemist
Michele Hickman, BS	1	Analytical Chemist
Llesenia Cercado	2	Technician
Robin Gill	21	Data Validation Coordinator
Sharon Malone, BS	7	Sample Management Supervisor
David Buck	1	Technician
Robert De La O	11	Systems Analyst and Alternate Sample Management Supervisor
Nicole DeMorin, BS, MBA	8	Client Service Consultant

6.0 Data Management

CAS/AQL has developed a standardized EDI (electronic data interchange) format using MS Excel® as a reporting platform. MS Excel® was selected because of the program's functionality and flexibility for end users. With a common standardized communication platform, our EDI provides data reporting in a variety of hardcopy and electronic formats. All CAS laboratories have standardized on this reporting platform for data interchange, enabling all locations to generate consistent-looking report or electronic data deliverables.

DATA ACQUISITION/ARCHIVING

Laboratory data are either acquired locally and then transferred to the centralized acquisition server, or acquired directly to the server. All data are eventually moved to this acquisition server for reporting and archiving purposes. At a minimum, our data systems are backed up every 24 hours. Incremental backups are performed several times during the day. The entire system is backed up twice a month and is stored in secure areas both on and off site.

ANALYTICAL DATA REPORTS

CAS/AQL reports the results generated in the laboratory to the client via an analytical report. This report includes a transmittal letter, a case narrative, client project information, specific test results, quality control data, chain of custody information, and any other project-specific support documentation.

In order to meet individual project needs, CAS/AQL provides several levels of analytical reports. Basic specifications for Tier I, II and III analytical data report deliverables are listed in the table on the following page.

BASIC EDD FIELD LISTS

Listed below are the fields that will be used for the “**Basic EDD (no QC)**”:

FIELD NAME	DESCRIPTION
Client	Client name as it appears on the chain of custody.
Project	Project name and number as it appears on the c.o.c.
Service Request	Lab. Service Request number
Sample	Client Sample ID
Lab Code	Lab. Sample ID
Date Collected	Date sample was collected (mm/dd/yyyy)
Date Received	Date sample was received by lab (mm/dd/yyyy)
Date Extracted	Date sample was extracted/prepped (mm/dd/yyyy)
Date Analyzed	Date sample was analyzed (mm/dd/yyyy)
Extraction Method	Extraction or prep method code
Analysis Method	Analysis method code
Matrix	Sample matrix
Basis	Dry, Wet, NA
Units	Unit of measure for result
Component	Compound or Analyte name
Dilution Factor	Factor of dilution i.e. for a 10:1 dilution, the dilution factor is 10
Reporting Limit	i.e. MRL, PQL
Detection Limit	i.e. MDL, IDL
Result	Concentration of component found in sample
Result Notes	Qualifiers and footnote flags

7.0 Related Project Experience

EPA SUPERFUND NPL SITE PROJECTS

SOIL VAPOR WELL GAS

HASSAYAMPA LANDFILL SUPERFUND SITE

ERROL L. MONTGOMERY & ASSOCIATES, INC., AND TREATEK/CONESTOGA ROVERS ASSOCIATES

TUCSON, AZ AND ST. PAUL, MN

Several hundred soil gas samples collected from vapor monitoring/extraction wells were analyzed. The soil gas data was used to track vadose zone contamination of halogenated and aromatic hydrocarbons and to assess the potential for groundwater contamination from the former hazardous waste area and a municipal and domestic waste landfill. During a separate phase of the study, the CAS/AQL laboratory analyzed split samples to assess the performance of the onsite mobile laboratory contractor.

SOIL VAPOR AND LANDFILL GAS SAMPLES

TYBOUTS CORNER LANDFILL TRUST

NEWARK, DE

Analyses were performed on soil vapor and landfill gas samples from a landfill site where both hazardous and municipal solid wastes have been disposed. Samples were analyzed for speciated volatile organic compounds (VOCs) according to EPA Method TO-14. Concentrations of methane gas ranged from ambient to 60%.

EXCAVATION AND PERIMETER MONITORING

MONTROSE SUPERFUND SITE, TORRANCE, CA

IT CORPORATION

IRVINE, CA

Analytical support was provided over a three-month period and involved the analysis of up to 80 samples per week. High and low-volume samples were analyzed for DDT and isomers (2,4'-DDT, 2,4'-DDE, 4,4'-DDT, 4,4'-DDD, 4,4'-DDE) by GC/electron capture detection (ECD) following EPA Methods TO-4A and TO-10A.

FENCE LINE AMBIENT AND RESIDENTIAL AIR MONITORING

PEARL HARBOR, HAWAII COMPLEX

OGDEN ENVIRONMENTAL AND ENERGY SERVICES, INC.

SAN DIEGO, CA

The CAS/AQL laboratory participated in a comparative study of two collection techniques for the measurement of VOCs in fence line ambient air samples. Collocated samples collected on carbon molecular sieve (CMS) traps and in pressurized passivated canisters were analyzed by thermal desorption GC/MS (EPA Method TO-2) and by GC/MS (TO-14). During a second phase of the study analyses were performed on time-integrated samples taken in passivated canisters from residential locations. The monitoring programs were conducted in support of the Comprehensive Long-Term

AMBIENT AIR MONITORING

AMBIENT AIR SAMPLES

LOUISVILLE, KY

USEPA REGION 4

ATLANTA, GA

Analyses were performed for a 12-month ambient air monitoring project that Region 4 conducted in residential areas. Air samples were collected on DNPH-treated silica gel tubes and analyzed for formaldehyde by HPLC following EPA Method TO-11A.

EMERGENCY RESPONSE AMBIENT AIR AND WORKER EXPOSURE MONITORING FOLLOWING THE CAJON FREIGHT TRAIN DERAILMENT

TRC ENVIRONMENTAL SOLUTIONS

IRVINE, CA

Analytical support was provided in the aftermath of the Cajon freight train derailment. The derailed freight cars contained a variety of chemicals including trimethyl phosphite, butyl acrylate and petroleum distillates. A potent mixture of toxic chemicals was released into the area during the conflagration. Laboratory personnel were on call 24 hours a day, 7 days a week to perform analysis of emergency response air samples. The laboratory provided results to the client in as little as 2 hours from the time of sample receipt.

AMBIENT AIR MONITORING PROGRAM

UNIVERSITY OF GEORGIA

ATHENS, GA

Samples collected on DNPH-coated silica gel cartridges were analyzed for formaldehyde, acetaldehyde and other speciated carbonyls during a 12-month study. The laboratory performed analysis of collocated samples taken on Waters and SKC brand DNPH cartridges. A statistical comparison of the results obtained from the two different sampling cartridges was performed.

AMBIENT AIR MONITORING AT THE CAMPBELL INDUSTRIAL PARK

STATE OF HAWAII, HEER DEPARTMENT

HONOLULU, HI

Ambient air samples were collected in passivated canisters and Tedlar[®] bags during odor events and unusual weather conditions. Samples were analyzed for speciated VOCs according to EPA Method TO-14 and for speciated sulfur compounds using gas chromatography/sulfur chemiluminescence detection (GC/SCD) by ASTM Method D5504-94.

SOURCE TESTING ANALYSIS

CHARACTERIZATION OF POLLUTANTS FROM ENGINE AIR INTAKES AND AUXILIARY POWER UNITS

HONEYWELL, INC.

PHOENIX, AZ

Ongoing analytical support has been provided for this project that has been characterizing pollutants from these two sources of air from crew and passenger areas of airplanes. Air samples are collected on a variety of media and analyzed for aldehydes, volatile organic compounds, tricresyl phosphates, speciated hydrocarbons and gas composition. Results from the analyses are used to assess maintenance needs for engines and APUs.

DETERMINATION OF DESTRUCTION REMOVAL EFFICIENCY OF HAZARDOUS WASTE IN MOLTEN METAL REACTION VESSELS

MOLTEN METAL TECHNOLOGY

FALL RIVER, MA

Analyses were performed on process off-gas samples from a hazardous waste destruction process. Process off-gas samples were collected in passivated Summa canisters and were analyzed for speciated volatile organics, ozone precursors, reduced sulfur species, methane, and hydrogen cyanide. Source characterization was performed using interpretive GC/MS.

ANALYSIS OF VOLATILE COMPOUNDS IN PIG MANURE

UNIVERSITY OF MINNESOTA

ST. PAUL, MN

Pig manure samples were weighed and placed in Tedlar® bags, which were filled with nitrogen and heated for a short period of time. The headspace was analyzed for sulfur compounds by GC/Flame photometric detection (FPD) and for VOCs by GC/MS.

COMPREHENSIVE MEASUREMENT OF SOURCE EMISSIONS FROM RUBBER AND TIRE MANUFACTURING

POOLED SOURCE TESTS -RUBBER MANUFACTURERS ASSOCIATION (RMA)

TRC ENVIRONMENTAL CORPORATION

LOWELL, MA

Samples were analyzed for a project performing a detailed source characterization of emissions from tire manufacturing plants. The laboratory quantified the volatile organics from the Clean Air Act Hazardous Air Pollutants (HAPs) list in the instrument calibration range and performed a total sample characterization using interpretive mass spectrometry (EPA TO-14). In addition, the analytical project also included measurement of reactive organic gases and precursors to ozone formation and a quantitative measurement of reduced sulfur compounds.

PRODUCT EVALUATION/MATERIALS TESTING

THERMAL DECOMPOSITION OF AVIATION FLUIDS

ALLIEDSIGNAL AEROSPACE

PHOENIX, AZ

Several test measurements were conducted to quantify the thermal degradation of various hydraulic and deicing fluids. Aliquots of each fluid were placed in specially prepared glass boats and thermally desorbed at 450°F with zero grade air. The off-gas products were collected onto DNPH cartridges, PUF/XAD sampling trains and into Tedlar® bags. The sample media were analyzed for speciated carbonyls (EPA Method TO-11), speciated polynuclear hydrocarbons (EPA Method TO-13), tricresyl phosphate (EPA Method TO-13), speciated C₂-C₁₂ hydrocarbons (GC/FID Ozone precursor method) and speciated volatile organic compounds (EPA Method TO-15).

ANALYSIS OF COMBUSTION GASES FROM THE SPACE SHUTTLE COLUMBIA

NATIONAL AERONAUTICAL AND SPACE ADMINISTRATION (NASA)

LEWIS RESEARCH CENTER

CLEVELAND, OH

Samples were analyzed for a combustion gas experiment from the space shuttle Columbia, Space Transportation Systems, Mission 87. Tests performed include analysis gross gas composition by thermal conductivity detection according to ASTM Method D1946, analysis of speciated hydrocarbons using cryogenic concentration/gas chromatography/flame ionization detection, and analysis of speciated VOCs according to EPA Method TO-15.

ASSAY OF HEALTH SUPPLEMENTS

BIOSYNERGY NUTRICEUTICALS

SAUSALITO, CA

Health supplements were assayed for cetyl myristate and cetyl myristoleate using GC/MS.

EVALUATION OF BIOMEDICAL DEVICES

MINIMED

SYLMAR, CA

Trace gas analysis was conducted on polymer-based sacks and pump fluids. The sacks were analyzed for ultra trace levels of nitrogen and oxygen using a closed loop injection system. Pump fluids were analyzed for neopentane using headspace gas chromatography/flame ionization detection (GC/FID).

MEASUREMENT OF FORMALDEHYDE EMISSIONS FROM BUILDING MATERIALS

EMCON

BOTHELL, WA

Formaldehyde emissions were determined for wood-based building materials. Representative samples were placed in a simulated environmental chamber and were allowed to off-gas for up to 72 hours. The gas from inside the environmental chamber was sampled onto DNPH-coated silica gel cartridges. The DNPH cartridges were analyzed using HPLC with ultra violet detection (UV).

INDOOR AIR QUALITY ANALYSIS

INDOOR AIR QUALITY MONITORING OF PUBLIC SCHOOLS SITUATED ON OR NEAR ENVIRONMENTALLY COMPROMISED PROPERTIES LOS ANGELES UNIFIED SCHOOL DISTRICT LOS ANGELES, CA

Analytical support was provided for a project that used multiple methods and media collection techniques to identify potential impacts on the public health of those attending the schools. The data generated were used for health risk assessment purposes. Samples were collected during Friday and Saturday evenings, delivered to the lab between 8:00 PM and midnight. Sample results were due in electronic format on the following Monday. Typical sampling events included the collection of fifty to sixty samples using various types of sample media and containers. Among those used were: stainless steel canisters for VOCs and methane, Tedlar® sampling bags for speciated reduced sulfur compounds, specially treated filter cassettes for speciated isocyanate compounds and DNPH cartridges for speciated carbonyl compounds.

ENVIRONMENTAL MONITORING AT IN-VITRO FERTILIZATION CLINICS AMBIENT LABS, INC., NEW YORK, NY ALPHA ENVIRONMENTAL, INC., JERSEY CITY, NJ

Analytical support has been provided on an on-going basis for several projects related to environmental monitoring activities at in-vitro fertilization clinics. Testing is performed on a variety of materials and products that are used in the IVF process. Materials used in the construction of the incubators are tested individually and combined for off-gassing of chemical compounds. Testing is conducted using simulated environmental chambers, thermal desorption apparatus, passivated canisters and solid adsorbent cartridges.

RESIDENTIAL INDOOR AIR QUALITY INVESTIGATIONS STATE OF MAINE, DEPARTMENT OF ENVIRONMENTAL PROTECTION AUGUSTA, ME

Analyses are regularly conducted on indoor air quality samples taken in residences where a kerosene or heating oil release has occurred. Samples are collected in passivated stainless steel canisters and analyzed for speciated paraffins, substituted aromatic hydrocarbons, MtBE and naphthalene according to EPA Method TO-14. The samples are also analyzed for total petroleum hydrocarbons as kerosene or heating oil using a modification of NIOSH Method 1550.

BUILDING ASSESSMENT SURVEY AND EVALUATION PROGRAM (BASE) STUDY U.S. ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL HEALTH AND ENGINEERING, INC. NEWTON, MA

CAS/AQL provided analytical support for an indoor air project compiling a database to evaluate various test methods for the sampling and analysis of indoor air pollutants in large office buildings. As part of the pilot study, the laboratory completed method detection limit (MDL) studies to determine the compatibility of the target analytes with

PUBLICLY OWNED TREATMENT WORKS (POTWs) AND ODOR STUDIES

STATEWIDE POOLED EMISSION ESTIMATION PROGRAM (PEEP) FOR COMPLIANCE WITH THE AIR TOXICS "HOT SPOTS" INFORMATION AND ASSESSMENT ACT OF 1987 (CALIFORNIA AB2588)

**MONTGOMERY-WATSON (MANAGING CONSULTANT)
PASADENA, CA**

Analytical support was provided to a statewide study to determine air toxics emissions from various processes of Publicly Owned Treatment Works (POTWs). Sixteen wastewater treatment facilities located throughout the state of California participated in the pooled source test study. Approximately 800 samples were analyzed over a four-month period during 1990 and an additional 150 samples during early 1991. The majority of the samples were analyzed for eighteen volatile organic toxic air contaminants including halogenated and aromatic hydrocarbons, glycol ethers and acetates. Samples taken in Summa passivated canisters were analyzed for reactive organic gases. The laboratory was required to perform analysis of all samples within twenty-four hours from the time of sample receipt.

The laboratory assisted the managing consultant with the development of sampling and analytical protocols to be used for the study. It was necessary to obtain the approval of proposed methods for sampling and analysis from several local agencies, including the South Coast Air Quality Management District, the Bay Area AQMD, the San Diego AQMD, the Sacramento Regional AQMD, and the Monterey Regional Air Pollution Control District.

OTHER POTW AND ODOR ANALYSIS EXPERIENCE:

The laboratory continues to analyze whole air and wastewater samples from POTWs such as those listed below. The analysis data are used to calculate plant emissions and/or identify unknown compounds.

CLIENT	PROJECT
Metropolitan Water Reclamation District of Greater Chicago (MWRDGC)	Characterization of odorous emissions
Onondaga County Wastewater Treatment Facility, New York State	Characterization of source emissions
General Motors Corporation	Analysis of odorous emissions from paint spray booths
Sverdrup Civil, Inc., Maryland Heights, Missouri	Bissell Odor Study
City of LA Hyperion Treatment Plant	Characterization of odorous emissions
City of Vail, CO – Integra Engineering, Denver, CO	Engineering study
City of San Francisco – AB2588 Compliance Monitoring	Analysis of source emissions, ambient air and wastewater

PULP AND PAPER INDUSTRY RELATED PROJECTS

The CAS/AQL laboratory offers a variety of services to the pulp and paper industry including the analysis of vapor, liquid and solid matrices for reduced sulfur compounds, aldehydes and ketones, methanol, turpentine and speciated terpenes hydrocarbons. Analytical services related to workplace monitoring are also provided.

Over the past 12 years more than 35,000 analyses for reduced sulfur compounds have been performed. Liquid samples for reduced sulfur compounds are analyzed by a method developed by CAS/AQL, which involves a purge and collect technique followed by analysis via GC/FPD or GC/SCD. Recoveries for the twenty target reduced sulfur-containing analytes in spiked samples are generally greater than 90 percent.

PARTIAL LISTING OF PULP AND PAPER INDUSTRY CLIENTS	
GEORGIA PACIFIC	LOUISIANA PACIFIC
FORT JAMES	CROWN VANTAGE
INTERNATIONAL PAPER	UNION CAMP
MEAD PAPER COMPANY	JEFFERSON SMURFIT
STONE CONTAINER	WILLAMETTE INDUSTRIES

PARTIAL LISTING OF LANDFILL PROJECTS
Orange County Landfills, CA Integrated Waste Management District: Brea Alpha Olinda Santiago Canyon Frank Bowerman Prima Deshecha
City of Los Angeles Landfills: Lopez Canyon Toyon Canyon Terminal Island
Town of Springfield, VT
City of Whittier, CA
City of Sacramento, CA
Azusa Land Reclamation Company
Roseburg Landfill, Douglas County, OR
Seneca Meadows Landfill, NY
Shady Lane Landfill, Nashua, NH
Tybouts Corner, Tybouts Corner, DE
City of Wichita Falls, TX
City of El Paso, TX
City of Garland, TX
City of Flagstaff, AZ

SPECIALIZED SERVICES

CAS/AQL's specialized services are focused in two principal areas: product evaluations and indoor air quality investigations. Our Certified Industrial Hygienist (CIH) has more than 12 years experience as an industrial hygiene consultant. Examples of projects include:

- Characterization of organic compounds associated with odors in an SUV
- Comparison of clearance of allergen-sized airborne particulate by electrically powered household air cleaning devices
- Evaluation of air purifiers in small and large chambers: environmental tobacco smoke (ETS)
- Evaluation of portable air purifier: particulate and VOCs in vehicle exhaust and ETS
- Evaluation of the effectiveness of a portable air purification device at reducing levels of "bathroom" odors (VOCs, sulfur compounds)
- Identification of constituents of black sooty material on interior and exterior surfaces
- Identification of potentially odorous compounds from components of a mirrored door

- Evaluation of airborne levels of hydrocarbons in a business district, Prescott, AZ
- Indoor air quality surveys in residences, Granada Hills, Glendale, Loma Linda, CA
- Indoor air quality investigation in an office area, Newbury Park, CA
- Evaluation of atypical indoor air pollutants in an office area, Santa Barbara, CA

- Assessment of airborne and dermal arsenic exposures in a semi-conductor manufacturing facility, Newbury Park, CA
- Exposure monitoring during a lead abatement project, Santa Barbara, CA
- Industrial hygiene survey of a PVC conduit manufacturer, Reno, NV
- Industrial hygiene survey during sample extraction, Jacksonville, FL

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 2



Client:

Client Sample ID:

Client Project ID:

CAS Project ID:

CAS Sample ID:

Volatile Organic Compounds (VOCs)

EPA Method TO-15

Sample Report

Test Code:

Instrument ID: HP5973/MS#7

Analyst:

Sampling Media: Summa canister

Test Notes:

Container ID:

Date Collected:

Date Received:

Date(s) Analyzed:

Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result $\mu\text{g}/\text{m}^3$	MRL $\mu\text{g}/\text{m}^3$	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.0	ND	0.48	
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
74-83-9	Bromomethane	ND	1.0	ND	0.26	
75-00-3	Chloroethane	ND	1.0	ND	0.38	
67-64-1	Acetone	ND	1.0	ND	0.42	
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18	
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25	
75-09-2	Methylene chloride	ND	1.0	ND	0.29	
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25	
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28	
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
67-66-3	Chloroform	ND	1.0	ND	0.20	
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18	
71-43-2	Benzene	ND	1.0	ND	0.31	
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16	
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1



Client:

Client Sample ID:

Client Project ID:

CAS Project ID:

CAS Sample ID:

Total Gaseous Non-Methane Organics (TGNMO)
EPA Method 25 C Modified
Sample Report

Test Code:

Instrument ID: HP5890A/FID/TCA

Analyst:

Sampling Media: Summa Canister

Test Notes:

Container ID:

Date Collected:

Date Received:

Date Analyzed:

Volume(s) Analyzed: 0.50 ml

Pi 1 = 0.0

Pf 1 = 0.0

D.F. = 1.00

CAS #	Compound	Result	MRL	Data Qualifier
		ppmV	ppmV	
	Total Gaseous Non-Methane Organics (as Methane)	ND	1.0	
	Total Gaseous Non-Methane Organics (as Hexane)	ND	0.17	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS
Page 1 of 1



Client:

Client Sample ID:

Client Project ID:

CAS Project ID:

CAS Sample ID:

**Formaldehyde and Other Aldehydes
EPA Method TO-11A
Sample Report**

Test Code:

Instrument ID: HPLC/UV-VIS 360

Analyst:

Sampling Media: DNPH Silica Gel Tube

Test Notes:

Date Collected:

Date Received:

Date Analyzed:

Desorption Volume: 1.0 ml

Volume Sampled: 100 Liters

CAS #	Compound	Result	Result	MRL	Result	MRL	Data Qualifier
		ng/Sample	µg/m ³	µg/m ³	ppb	ppb	
50-00-0	Formaldehyde	< 35	ND	0.35	ND	0.29	
75-07-0	Acetaldehyde	< 35	ND	0.35	ND	0.19	
123-38-6	Propionaldehyde	< 35	ND	0.35	ND	0.15	
123-73-9	Crotonaldehyde	< 35	ND	0.35	ND	0.12	
123-72-8	Butyraldehyde	< 35	ND	0.35	ND	0.12	
100-52-7	Benzaldehyde	< 40	ND	0.40	ND	0.092	
590-86-3	Isovaleraldehyde	< 35	ND	0.35	ND	0.099	
110-62-3	Valeraldehyde	< 35	ND	0.35	ND	0.099	
529-20-4	o-Tolualdehyde	< 35	ND	0.35	ND	0.071	
620-23-5 104-87-0	m-Tolualdehyde + p-Tolualdehyde*	< 70	ND	0.70	ND	0.14	
66-25-1	Hexaldehyde	< 35	ND	0.35	ND	0.085	
5779-94-2	2,5-Dimethyl Benzaldehyde	< 35	ND	0.35	ND	0.064	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

NA = Not applicable

BC = Results reported are not blank corrected

* = Coeluting Compounds

Verified By: _____ Date: _____

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1



Client:

Client Sample ID:

Client Project ID:

CAS Project ID:

CAS Sample ID:

Sulfur Compounds ASTM D5504-01 Sample Report

Test Code:

Instrument ID: HP5890A/SCD #5

Analyst:

Sampling Media: Tedlar bag

Test Notes:

Date Collected:

Time Collected:

Date Received:

Date Analyzed:

Time Analyzed:

Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result $\mu\text{g}/\text{m}^3$	MRL $\mu\text{g}/\text{m}^3$	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.00	ND	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	ND	7.80	ND	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS
Page 1 of 1

Client:

Client Sample ID:

Client Project ID:

CAS Project ID:

CAS Sample ID:

BTEX
CARB Method 410 Modified
Sample Report

Test Code:

Instrument ID: HP5890/PID #2

Analyst:

Sampling Media: Summa canister

Test Notes:

Date Collected:

Date Received:

Date Analyzed:

Volume(s) Analyzed: 1.00 ml

D.F. = 1.00

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Detection Limit mg/m ³	Result ppmV	MRL ppmV	Detection Limit ppmV	Data Qualifier
71-43-2	Benzene	0.064	0.16	0.064	0.020	0.050	0.020	
108-88-3	Toluene	0.075	0.19	0.075	0.020	0.050	0.020	
100-41-4	Ethylbenzene	0.043	0.22	0.043	0.010	0.050	0.010	
136777-61-2	<i>m,p</i> -Xylenes	0.13	0.22	0.13	0.030	0.050	0.030	
95-47-6	<i>o</i> -Xylene	0.087	0.22	0.087	0.020	0.050	0.020	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

**Client:****Client Sample ID:****Client Project ID:**

CAS Project ID:

CAS Sample ID:

Air-Phase Petroleum Hydrocarbons

Massachusetts Dept. of Environmental Protection

Sample Report

Test Code:

Instrument ID: HP5973/MSD #7

Analyst:

Sampling Media: Summa canister

Test Notes:

Date Collected:

Date Received:

Date Analyzed:

Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result $\mu\text{g}/\text{m}^3$	MRL $\mu\text{g}/\text{m}^3$	Result ppbV	MRL ppbV	Data Qualifier
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
71-43-2	Benzene	ND	0.50	ND	0.16	
108-88-3	Toluene	ND	0.50	ND	0.13	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	<i>m,p</i> -Xylenes	ND	0.50	ND	0.12	
95-47-6	<i>o</i> -Xylene	ND	0.50	ND	0.12	
91-2-3	Naphthalene	ND	0.50	ND	0.095	
91-57-6	2-Methylnaphthalene	ND	0.50	ND	0.086	
	C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	ND	50	NA	NA	
	C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	ND	10	NA	NA	
	C ₉ -C ₁₀ Aromatic Hydrocarbons	ND	10	NA	NA	

¹Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.²C₅-C₈ Aliphatic Hydrocarbons exclude the concentration of Target APH Analytes eluting in that range.³C₉-C₁₂ Aliphatic Hydrocarbons exclude conc of Target APH Analytes eluting in that range AND conc of C₉-C₁₀ Aromatic HydrocarbonsND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

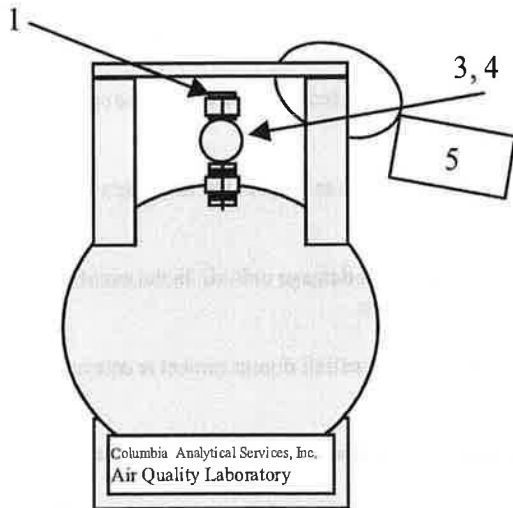
Verified By: _____ Date: _____



Columbia Analytical Services, Inc.
Air Quality Laboratory
An Employee Owned Company

Summa Canister Instructions How to Take a Grab Sample

1. Using a 9/16" wrench, remove the brass cap above the valve on top of the Summa Canister.
2. Attach the canister securely to the source using 1/4" tubing and a Swagelok fitting. (If needed)
3. Turn the green knob 1 1/4 turns counterclockwise to open the valve. The canister was evacuated and pressure checked at Columbia Analytical, so you will hear a hissing noise as air flows in.
4. Once the hissing noise stops, close the valve by turning the green knob 1 1/4 turns clockwise. (do not over-tighten). Replace the brass cap. (If you have a field vacuum gauge, you can check the pressure at this time.) The final pressure will be checked at CAS prior to analysis of the canister.
5. Identify the sample with the provided tag, and use the provided plastic tie to connect the label to the canister. Please do not make any kind of mark on the canister (whether by tape, label, or marker).
6. Complete a chain of custody form and send it with the canister to CAS.
The same boxes can be used.



- Do not remove CAS's identification label or serial number.
- A \$20.00 cleaning charge will be added if the surface of the canister is marked with tape, a label, or marker.
- Do not connect to a source greater than 50 psi. (the fitting is a 1/4" male Swagelok fitting).
- User assumes all responsibility for damage or loss. In the event of loss, user will be charged full equipment value.

The rental period is ten days. Please call if your project is delayed.

**If you have questions, call CAS
(805) 526-7161**

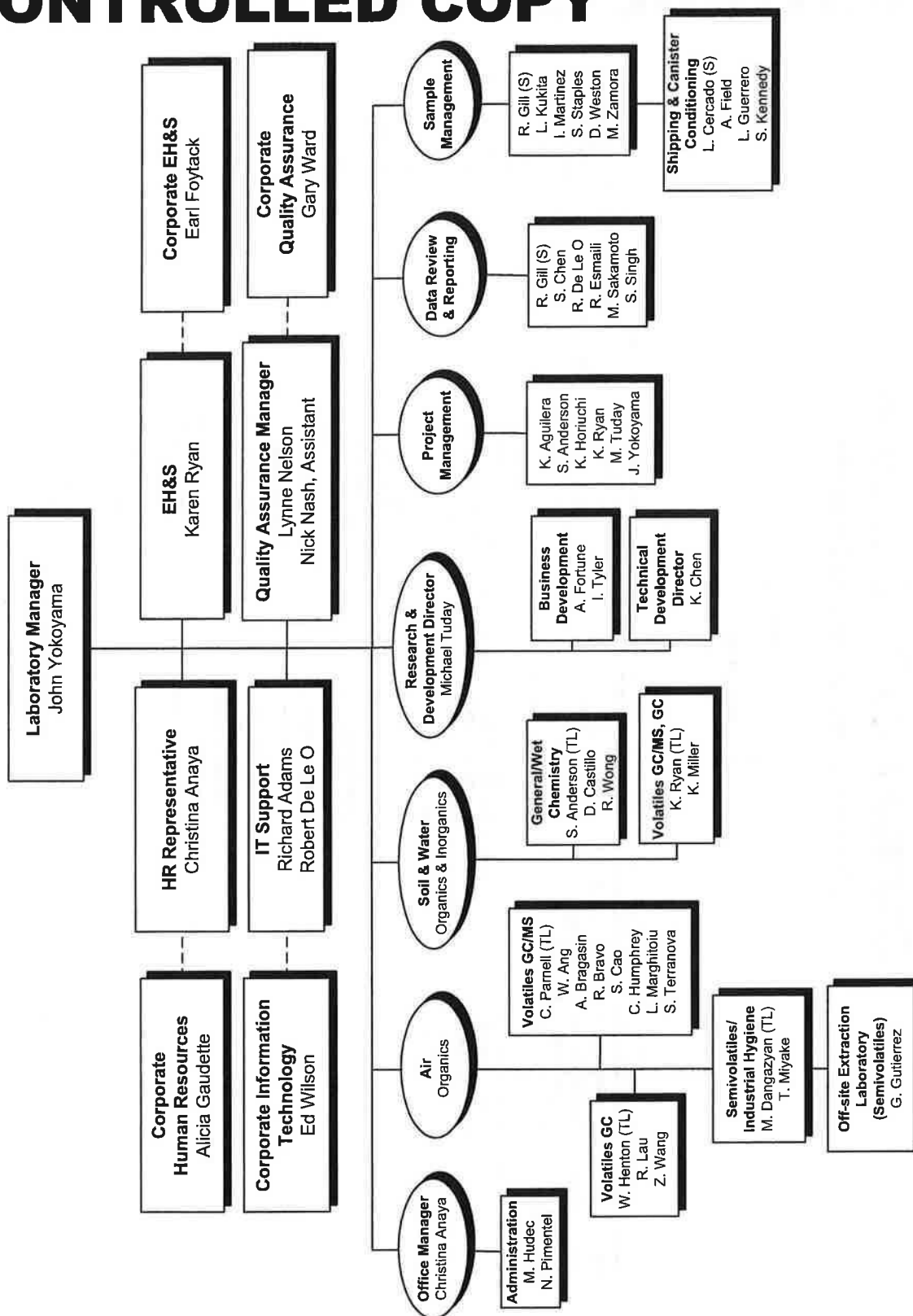
**ship to:
Columbia Analytical Services, Inc.
2665 Park Center Drive, Suite D
Simi Valley, CA 93065**

Attn: Sample Receiving

10.0 Technical Notes

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Columbia Analytical Services, Inc. Simi Valley, California Laboratory Organization



UNCONTROLLED COPY

RICHARD B. ADAMS

2006 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

SYSTEMS ANALYST/PROGRAMMER – 2006 to Present

Responsibilities

Responsible for coordination of local laboratory information systems implementation, computer systems, electronic data archiving, e-mail functions, and instrument analysis software. Also responsible for client spreadsheets and disk deliverables and computer maintenance/upgrades. Support on site personnel with their data processing needs (hardware and software) to produce hardcopy and electronic data deliverables.

Experience

Systems Analyst/Programmer IV, Columbia Analytical Services, Inc., Canoga Park, CA, 2001-2006. Responsible for computer systems, electronic data archiving, e-mail functions, and instrument analysis software. Also responsible for client spreadsheets and disk deliverables and computer maintenance/upgrades. Support on site personnel with their data processing needs (hardware and software) to produce hardcopy and electronic data deliverables.

Manager, Information Systems, Polymer Engineering Corp., Oxnard, California, 1999-2001. Responsibilities included NT network management (WAN/LAN); selected computer-related equipment and contractors for all facilities; performance client and server hardware upgrades/repairs; software installation; created databases necessary for documentation; and maintained data security back-up functions. Trained personnel on software in use, and supervised the Document Control Department.

QC Manager, Polymer Engineering Corp., Oxnard, California, 1995-1999. Responsible for product delivery system design and evaluation; involved with ISO 9000 implementation and documentation. Also responsible for computer and laboratory instrument troubleshooting, supervision of six employees and documentation control.

Environmental Lab Supervisor, Ventura Regional Sanitation District, Ventura, California, 1989-1994. Responsible for all laboratory operation, including data review, method development, quality, troubleshooting, and budget.

Inorganic Lab Supervisor, ENSECO/CRL, Ventura, California, 1985-1989. Responsible for workload distribution, development and management of LIMS, data review, method development, instrument installation, and performance of non-routine tests.

Education

CERTIFICATE, Microsoft Office'97, New Horizons Computer Learning Center, Thousand Oaks, California, 1999.

CERTIFICATE, MCSE Track, New Horizons Computer Learning Center, Thousand Oaks, California, 2000.

BS, Chemistry, California State College, San Bernardino, California, 1977.

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SUSAN "SUE" M. ANDERSON

2006 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

PROJECT MANAGER / TECHNICAL MANAGER (GENERAL CHEMISTRY) - 2006 to Present

Responsibilities

Responsibilities include interfacing with clients to provide technical project management and customer service, including project scheduling, tracking and consulting to determine appropriate sampling and analytical protocols. Coordinates with the laboratory and administration to ensure that analyses are properly executed and meets the clients' needs. Also responsible for the training of general chemistry staff, maintenance of MDL studies and standard operating procedures, data evaluation and report responsibility.

Experience

Technical Manager, General Chemistry, Columbia Analytical Services, Inc., Canoga Park, CA, 2002-2006. In addition to the Project Manager duties listed below, also responsible for the management of General Chemistry laboratory operations, including the financial aspects. This includes supervision and coordination of work load and training personnel as necessary as well as supervision of method development and certification, method troubleshooting, and instrument maintenance. Also responsible for training staff, maintenance of MDL studies & SOPs, data evaluation and report responsibility. Other duties include participation in the formulation of project strategy and meetings involving major technical issues, working with regional senior management in short- and long-range planning, and other duties as assigned.

Project Manager II, Columbia Analytical Services, Inc., Canoga Park, California, 2000-2002. Responsibilities include interfacing with clients to provide technical project management and customer service, including project scheduling and tracking from the delivery of sample bottles to client site to the delivery of the completed analytical report. Ensures that the client receives timely, appropriate, and quality analytical services. Coordinates with the CAS laboratory and administration to ensure that analyses are properly executed and meet the clients' needs. Coordinates sub-contracting with internal and external laboratories. Acts as a liaison for all client-related activities within Columbia Analytical Services, Inc. Interfaces with word processing staff to answer technical questions that arise during EDD completion. Has high level role in data evaluation and report responsibility. High level client and regulatory agency contact.

Scientist I-III, Columbia Analytical Services, Inc., Canoga Park, California, 1992-2000. Responsible for performing inorganic analyses such as: alkalinity, ammonia, BOD, COD, cyanide, sulfide, reactivity, fluoride, pH, hardness, hexavalent chromium, phenols, surfactants, total-dissolved-suspended solid, conductivity, turbidity, nitrate, chloride by titration, turbidimetric sulfate, color, odor, organic lead, residual chlorine, settleable solids, specific gravity, carbon dioxide, TCLP/STLC metals and semi-volatile extraction. Also perform analyses for TRPH and oil and grease and occasionally perform metals digestion. Also ran the Graphite furnace for all furnace metals and was responsible for standard prep and maintenance.

Wet Chemist, National Environmental Testing, Bartlett, Illinois, 1990-1991. Responsible for the analyses for wastewater parameters and some inorganic analytes.

Education

BS, Biochemistry, University of Illinois, Urbana-Champaign, Illinois, 1989.

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ARISTOTLE B. BRAGASIN

2004 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST – 2004 to Present

Responsibilities

Analyzing indoor air, ambient air and source emission samples by GC/MS methods, standard preparation, perform maintenance on instruments when required, real time data reduction, participate in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Scientist II, GC/MS VOA Laboratory, Columbia Analytical Services, Canoga Park, California, 1998-2004. Responsible for Volatile GC/MS sample analysis of soil, groundwater and wastewater according to SW-846 Method 8260B and EPA 624. Utilize Tekmar 2016, OI Analytical DPM-16, and Archon autosampler, Tekmar 2000, 3000, and 3100 and OI Analytical 4560 concentrators, HP5890 and 6890 GC systems with HP 5971, 5972, and 5973 MSD's. Also responsible for reducing and reporting data according to standard operating procedures and contractual requirements. Perform TCLP-ZHE extractions, routine troubleshooting and instrument maintenance, and the storage and disposal of VOA samples. Review GAS/BTEX analytical data generated for completeness and contractual requirements according to SW-846 methods.

Analyst III, Sample Management Office, Columbia Analytical Service, Inc., Canoga Park, California, 1996-1998. Duties primarily as listed below.

Analyst II, Sample Management Office, Columbia Analytical Services Inc., Canoga Park, California, 1995-1996. Primary responsibilities include logging samples and requested analyses, distribution of service request forms to each department, storage and disposal of samples, and shipment of samples to other laboratories. Logging jobs into the LIMS system.

Lab Technician, Pace Inc., Camarillo, California, 1995. Duties included extraction of cyanide and phenols via steam distillation. Determined amounts of cyanide, phenols, phosphorus, and nitrogen using Lachat Automated Analyzer. Determined amounts of oil and grease, total dissolved solids, total suspended solids, and bacteria in samples.

Laboratory Assistant, Aerotek Lab Support, Gardena, California, 1995. Cleaned and sterilized glassware in the protein chemistry department of Amgen Inc., Thousand Oaks, California.

Specimen Processor, Olsten Staffing Services, Thousand Oaks, California, 1994. Data entry of patient information and requested tests. Separated and labeled specimens for different departments at Physicians Clinical Laboratory, Newbury Park, California.

Education

BS, Biochemistry, California Polytechnic State University at San Louis Obispo, San Louis Obispo, California, 1995

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SIMON CAO

2007 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST– 2007 to Present

Responsibilities

Analyzing indoor air, ambient air and source emission samples by GC/MS methods, standard preparation, perform maintenance on instruments when required, real time data reduction, participate in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Chemist, Columbia Analytical Services, Canoga Park, CA. 2004-2006. Responsible for the analyses of base/acid/neutral (BNA) by EPA Method 8270C and low-level polycyclic aromatic hydrocarbons (PAH) by EPA Method 8270C-SIM. Perform data reduction, data review, and reporting. In addition, also responsible for routine instrument maintenance and troubleshooting.

Inorganics Supervisor, American Analytics, Chatsworth, CA. 2000-2004. Supervised wet chemistry and metals departments; responsible for the daily operation of sample analyses and the quality of report generation. Methods in wet chemistry department included analytical techniques such as ion selective electrodes, colorimetric, photometric, and gravimetric. Metals analyses were performed on ICP, CVAA, and GFAA. Also responsible for instrument maintenance, troubleshooting, and the training of new chemists.

Analyst III, Columbia Analytical Services, Canoga Park, CA. 1993-1999. Responsible for the extraction of environmental samples, both aqueous and soil matrixes, for diesels, pesticides/PCB, BNA, and volatile analyses by GC and GC/MS. Performed diesel analysis by EPA Method 8015B and gasoline/BTEX analysis by EPA Methods 8015B/8021.

Education

BS, Pharmaceutical Science, First Medical College of Shanghai, Shanghai, China. 1976.

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LLESENIA CERCADO

2000 TO PRESENT

Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position	TECHNICIAN – 2003 to Present
Responsibilities	Responsibilities include waste disposal, canister conditioning and preparation, fulfillment of media requests; shipping, occasionally receiving samples, and flow controller and critical orifice calibration and calibration checks. Additional responsibilities include coordination of canister maintenance and release and cleaning of canisters for field sampling, training within the department, sampling media inventory and pressure/vacuum gauge inventory and calibration checks between annual metrology calibrations.
Experience	<p>Technician, <i>Columbia Analytical Services, Inc., Simi Valley, CA</i>, 2003-2006. Responsibilities include waste disposal, canister conditioning and preparation, fulfillment of media requests; shipping and occasionally receiving samples. Additional responsibilities include training within the department, of flow controller and critical orifice calibration and checks, sampling media inventory and pressure/vacuum gauge inventory and calibration checks between annual metrology calibrations.</p> <p>Analyst II, <i>Columbia Analytical Services, Inc., DBA Performance Analytical, Inc., Los Angeles, California</i>, 2000-2003. Responsibilities include preparation of samples using Soxhlet, shakeout and sonication extraction. Preparation of indoor air and industrial hygiene samples using solvent desorption. Gas Chromatographic screening of samples collected in Tedlar bags and summa canisters for volatile organic compounds</p>
Education	CERTIFICATE, Chemical Technology , <i>Los Angeles Trade Technical College, Los Angeles, California</i> , 2000.

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MADELEINE DANGAZYAN

1999 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST, Semi-Volatiles Team Leader – 2002 to Present

Responsibilities

Team leader for the Semi-Volatile group responsibilities are but not limited to training of chemists, peer review of analytical data, mentoring of junior analysts, standard operating procedure review and streamlining of methods. Duties also require performance reviews and development of direct reports. Additional responsibilities are analyzing ambient air, source emissions, and industrial hygiene samples using GC and HPLC. Preparation and analysis of air samples taken on various sorbent tubes for semi-volatile organic compounds. Determination of Carbonyls, Phenols and Cresols in ambient air and source emission samples using HPLC. Routine and necessary instrument maintenance.

Documentation of Demonstration of Capabilities is available for review.

Experience

Chemist, Columbia Analytical Services, Inc., Simi Valley, CA, 1999-2002. Responsibilities included training of chemists, peer review of analytical data, mentoring of junior analysts, standard operating procedure review and streamlining of methods. Additional responsibilities are analyzing ambient air, source emissions, and industrial hygiene samples using GC and HPLC. Preparation and analysis of air samples taken on various sorbent tubes for semi-volatile organic compounds. Determination of Carbonyls, Phenols and Cresols in ambient air and source emission samples using HPLC. Routine and necessary instrument maintenance.

Analytical Chemist, Air Products and Chemicals, Inc., Long Beach, California, 1995-1999. Quality assurance analysis of EPA protocol gases utilizing GC, FTIR and NDIR. Preparation of personnel schedules, lead laboratory contact.

Undergraduate Research, California State University at Northridge, Northridge, California, 1993-1994. Assisted professor with improving and implementing student laboratory experiments to better utilize a GC/MS.

Education

BS, Chemistry, California State University at Northridge, Northridge, California, 1995.

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ROBIN GILL

1991 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

DATA VALIDATION COORDINATOR AND TEAM LEADER – 2002 to Present

Responsibilities

Team leader responsibilities are evaluation and approval of work shifts, vacation requests, training and mentoring new data validation team members, in addition to yearly performance reviews to evaluate job achievements. Data validation responsibilities are for data review and validation as well as data package compilation, job tracking, archiving and the production of laboratory reports. Interacts with project managers and Quality Assurance Program Manager to ensure that all reports fulfill client requirements as well as QA/QC needs. Also serves as a backup for case narrative generation and manages the turn around times so that reports are distributed to the clients in a timely manner.

Experience

Project Manager III, Quality Control Coordinator, Columbia Analytical Services, Inc., DBA Performance Analytical, Inc., Los Angeles, California, 1994-2002. Responsibilities listed above.

Project Manager III, Quality Control Coordinator, Performance Analytical Services, Inc., Canoga Park, California, 1991-1994. Primarily responsible for data review and validation as well as data package compilation. Also responsible for job tracking, archiving and the production of laboratory reports.

Data Group Supervisor, ABB Environmental, Camarillo, California, 1980-1991. Supervised five employees in the Data Group Department. Responsible for data review and validation, document control, data package compilation, job tracking and archiving, and the organization and prioritization of workload.

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KELLY M. HORIUCHI

2003 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

PROJECT MANAGER – 2005 to Present

Responsibilities

Responsibilities include interfacing with clients to provide technical project management and customer service, including project scheduling, tracking and consulting to determine appropriate sampling and analytical protocols. Coordinates with the laboratory and administration to ensure that analyses are properly executed and meets the client's needs.

Experience

Data Validation Coordinator, Columbia Analytical Services, Inc., Simi Valley, CA, 2003-2005. Responsibilities included validation of analytical results produced by the laboratory. Verification of client analytical requests, sample information, and reporting formats. Interacts with project managers and Quality Assurance Program Manager to ensure that all reports fulfill client requirements as well as QA/QC needs. Compiled quality control summary, and calibration data upon client request for data packages. Assist the Quality Assurance Program Manager with standard operating procedures, control charting, and audit preparation.

Database Analyst, Cure Autism Now (Autism Genetic Resource Exchange), Los Angeles, California, 2002-2003. Performed analysis of test data through data audits and queries, maintained extensive database, and coordinated data audits between Northern and Southern California locations. Additional duties included assisting in the creation of new databases, as needed, creation of SOP for phenotypic and genotypic data collecting, and process improvements for subject flow through the research project.

Scientist II, Data Validation Coordinator, Columbia Analytical Services, Inc., DBA Performance Analytical, Inc., Simi Valley, California, 2000-2002. Responsibilities included validation of all analytical results produced by the laboratory. Verification of client analyses, sample information, and reporting format. Compiled quality control summary, and calibration data upon client request for data packages. Assisted the Quality Assurance Program Manager with standard operating procedures, control charting, and audit preparation.

Administrative Assistant/Data Analyst, Specialty Laboratories, Santa Monica, California, 1999-2000. Performed retrieval, quality control, and organization of data. Compiled data for reporting of HIV, lead, urinalysis, kidney stones, and communicable diseases. Also communicated with the state DOH and clients regarding reporting requirements and demographic information.

Administrative Assistant, Horvitz & Levy LLP, Encino, California, 1991-1999. Report new cases to attorneys, check clients through conflict database, QC party information, maintain attorney calendars, and perform orientations of new attorneys.

Education

BA, Biology, California State University at Northridge, Northridge, California, 1998.

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LONNIE KUKITA

2006 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

SAMPLE MANAGEMENT CUSTODIAN – 2006 to Present

Responsibilities

Primary responsibilities include logging in samples and requested analyses, coordination of local courier services, distribution of service request forms to each department, storage and disposal of samples, and shipment of samples to other laboratories. Responsible for evaluating sample receipt compliance against the appropriate method requirements and recording any deviations. Also, maintains calibration and log of thermometers, as well as recording temperatures of all refrigerators and freezers and coordination of local courier services.

Experience

Technician, Supervisor Sample Management Office, Columbia Analytical Services, Inc., Canoga Park, CA, 2001-2006. Primary responsibilities include logging in samples and requested analyses, coordination of local courier services, distribution of service request forms to each department, storage and disposal of samples, and shipment of samples to other laboratories. Also responsible for supervision of department personnel, back up for Project Chemists, and development and maintenance of departmental SOPs.

Vault Librarian/Driver, Digital Images/Liberty Livewire, Burbank, California, 2000-2001. Responsibilities included storing and retrieving film and video from vault, data entry, and delivery and pick up from studios and film lab. Preparing large shipment of film to studios.

Clerk/Driver, American Scientific, Los Angeles, California, 1999-2000. Responsibilities included pick up and delivery of samples from field sites and offices and preparing samples for shipment. Maintaining daily temperature log books, transferring samples from analyst refrigerators to storage. Ordering supplies for laboratory, preparing bottle orders for client. Field sampling using bailers devices.

Sample Control/Driver, Del Mar Analytical, Van Nuys, California, 1994-1999. Responsibilities included data entry of samples, pick up and delivery, maintenance of lab temperature book and sample disposal. Assisting analysts with tests by weighing samples and performing minor analysis. Changing gas cylinders for Chemists. Washing laboratory glassware and bioassay tanks.

Education

AA, Electronic Drafting Design, Los Angeles Valley College, Los Angeles, California, 1976.

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LILIANA MARGHITOIU

2005 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST – 2005 to Present

Responsibilities

Analyzing indoor air, ambient air and source emission samples by GC/MS methods, standard preparation, perform maintenance on instruments when required, real time data reduction, participate in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Analytical Chemist, Capco Analytical Services, Ventura, California, 2004-2005. Responsible for qualitative and quantitative analyses of wastewater, drinking water, soil, and gas samples. Additionally, responsibilities included analysis of vapor phase, liquid and soil samples for various volatile compounds through GC and GC/MS (for 8020, 8015 EPA methods, sulfur and natural gas analysis). Performed analytical tests for water and soil using IC-Dionex (anions and per chlorate) and method development and implementation for IC and GC methods. Wrote and updated SOP's and participated in internal and external audit, review and validation of QC forms and books. Conducted training of other employees and reported and validated results. Performed maintenance on instruments and ordered supplies.

Loan and Insurance processor, Countrywide, Simi Valley, California, 2003-2004. Data entry, loan and insurance review and update.

Laboratory Assistant, Esoterix Endocrinology, Calabasas, California, 2002-2003. Responsible for reagent and media preparation, calibration and general maintenance of laboratory instruments, and documentation.

Chemistry and Physics Teacher, High School, Timisoara, Romania, 1997-1999. Teach Chemistry and Physics. Prepared students for High School final exam and University admission.

Education

BS, Chemistry and Physics, West University, Timisoara, Romania, 1997

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TAKASHI MIYAKE

2007 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST – 2007 to Present

Responsibilities

Responsibilities include analyzing ambient air, source emissions, and industrial hygiene samples using GC, GC/MS and HPLC. Preparation and analysis of air samples taken on various sorbent tubes for semi-volatile organic compounds. Determination of Carbonyls, Phenols and Cresols in ambient air and source emission samples using HPLC. Other responsibilities include standard preparation, performing maintenance on instruments when required, real time data reduction, participation in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Director of the Science Department and Science Teacher, Los Angeles International School, Torrance, California. 2003-2006. Responsible for making curriculum, planning the school events, teaching chemistry & biology (K-12) and supervising science teachers.

Researcher and Instructor, Osaka Institute of Technology, Osaka, Japan 2002-2003. Responsible for investigating antioxidative activities of charcoal made from woods in Wakayama Prefecture, Japan. Additionally, responsibilities included lecturing undergraduate Organic Chemistry and Organic Synthesis classes.

Manager of Research & Development Department and Quality Assurance Department, YH Products Corporation, Oxnard, California, 1998-2001. Responsible for development of analytical methods and product specifications, customer satisfaction detail reports and supervision of lab technicians.

Post Doctoral Researcher, University of California at Davis, Davis, California 1996-1998. Research included the investigation of toxic volatile carbonyl compounds in cigarette smoke, MTBE in gasoline, foods, beverages, oxidization of lipids in whole blood from human & various animals using Gas Chromatography. Also investigated the potential inhibition of the development of Atherosclerosis by a flavonoid isolated from young barley leaves *in-vitro*. Additionally responsible for the supervision of undergraduate and graduate students.

Education

Ph.D. Agricultural & Environmental Chemistry, University of California at Davis, Davis, California, 1996

MS, Applied Chemistry, Osaka Institute of Technology, Osaka, Japan, 1991

BS, Applied Chemistry, Osaka Institute of Technology, Osaka, Japan, 1988

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CHRISTOPHER J. PARNELL

1991 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position	CHEMIST, VOLATILE GAS CHROMATOGRAPHY / MASS SPECTROMETRY TEAM LEADER – 2000 to Present
Responsibilities	Team leader for the Volatile Gas Chromatography Mass Spectrometry group responsibilities are but are not limited to training of chemists, peer review of analytical data, mentoring of junior analysts, standard operating procedure review and streamlining of methods. Duties also require performance reviews and development of his direct reports.
Experience	<p>Documentation of Demonstration of Capabilities is available for review.</p> <p>Scientist VI, Columbia Analytical Services, Inc., DBA Performance Analytical, Inc., Los Angeles, California, 1994-2002. Responsibilities include analyzing indoor air, ambient air and source emission samples by GC/MS methods, standards preparation, perform maintenance on instruments when required, real time data reduction, participation in peer review process, and good practice of all QA/QC requirements.</p> <p>Scientist VI, Performance Analytical, Inc, Canoga Park, California, 1991-1994. Responsibilities listed above.</p> <p>Air Toxics Laboratory Supervisor, ABB Environmental Inc., Camarillo, California, 1990-1991. Responsibilities included scheduling client analyses and developing methods for non-routine analyses, and operating the Air Toxics laboratory.</p> <p>Analytical Chemist, C-E Environmental Inc., EMSI, Camarillo, California, 1987-1990. Responsibilities included overseeing the Pesticide/PCB analysis of samples under the EPA Contract Laboratory Program, and interfacing with the EPA and regional offices to respond to inquiries and performing GC analyses and extractions.</p> <p>Chemist, Damon Reference Laboratory, Newbury Park, California, 1986-1987. Responsibilities included performing Enzyme-linked immunosorbent assays, Western-Blot assays, and Protein Electrophoresis.</p>
Education	BS, Chemistry, University of California at Santa Barbara, Santa Barbara, California, 1986.

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MICHELLE H. SAKAMOTO

2000 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

DATA VALIDATION COORDINATOR – 2005 to Present

Responsibilities

Responsibilities included validation of analytical results produced by the laboratory. Verification of client analytical requests, sample information, and reporting formats. Interacts with project managers and Quality Assurance Program Manager to ensure that all reports fulfill client requirements as well as QA/QC needs. Compiled quality control summary, and calibration data upon client request for data packages.

Experience

Chemist, Columbia Analytical Services, Inc., Simi Valley, CA, 2002-2005. Analyzing indoor air, ambient air and source emission samples by GC/MS methods, standard preparation, perform maintenance on instruments when required, real time data reduction, participate in peer review process, and good practice of all QA/QC requirements.

Data Validation Coordinator, Columbia Analytical Services, Inc. DBA Performance Analytical, Inc. Los Angeles, California, 2002. Responsibilities included validation of all analytical results produced by the laboratory. Verification of client analytical request, sample information, and reporting formats. Compiled quality control summary and calibration data upon client request for data packages.

Analytical Chemist, Columbia Analytical Services, Inc. DBA Performance Analytical, Inc. Los Angeles, California, 2000-2002. Responsibilities included analysis of vapor phase and liquid samples for various volatile compounds, perform maintenance on instruments when required, real time data reduction, participate in peer review process, maintain working knowledge of all GC methods performed in laboratory, and good practice of all QA/QC requirements

Technical Support Specialist, Quidel Corporation, San Diego, California, 2000. Provided technical support of diagnostic products to medical professionals, sales representative, and laypersons via the telephone. Additional duties included documentation of complaints and follow up with customers.

Office Manager/Receptionist, Manex Visual Effects, Culver City, California, 1999-2000. Responsible for operation of the switchboard, greeting clients, purchase order requests, and timecard data entry.

Laboratory Technician, Prince William County Service Authority, Woodbridge, Virginia, 1996-1999. Responsible for qualitative and quantitative analyses of wastewater and drinking water samples. Also responsible for reagent and media preparation, calibration and general maintenance of laboratory instruments, and documentation and data entry of results.

Associate Process Group Chemist II, Quidel Corporation, San Diego, California, 1994-1995. Separated, purified, and conjugated proteins; performed product release analysis; assay performance; and buffer and reagent formulation.

Education

BA, Biology, Point Loma Nazarene University, San Diego, California, 1992

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SADIA TERRANOVA

2007 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST – 2007 to Present

Responsibilities

Analyzing indoor air, ambient air and source emission samples by GC/MS methods, standard preparation, perform maintenance on instruments when required, real time data reduction, participate in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Environmental Research Analyst, SGS UK, Liverpool, England, 2006-2006. Performed a variety of analytical tests using EPA protocols using GC/MS/MS, Provided new method research and development, method validation, record keeping and maintained the laboratory inventory.

Material Analyst / Supervisor, ColorMatrix, Liverpool, England, 2005-2006. Performed moisture analysis and other analyses using Minolta, Viscometer and Paar. Performed site sampling and record keeping, method validation and research & development.

QC Chemical Analyst, Ineos Silicas, Warrington, England, 2004-2005. Performed moisture analysis and other analyses using Minolta, Viscometer and Paar. Performed site sampling and record keeping, method validation and research & development.

Material & QC Analyst & Project Development, LG Phillips - Displays, Southport, England, 2002-2003. Performed analyses of metal oxides using XRF, TGA, tensile tester, electrical & magnetic instruments, project planning and coordinating, method validation, and thermal analyses.

QA Analyst / Technician, Astra Zeneca, Macclesfield, England, 2002-2002. Quality control of drugs under GMP and GLP practices.

Material Experimental Analyst / Process Technician, Nortel Networks, Paignton, England, 2000-2002. Quality control of Opto-electronic resins using GC/MS, DSC, FTIR, viscometer, and titration. Testing of in-house resins, surface analysis including SEM, EDX, and contact angles. Failure analyses using metallurgy techniques and optical microscopy, x-ray analysis, sectioning and tensile testing. Analysis of new products for on line process improvement, ensured continued operation of production equipment, environmental sampling and compliance with health and safety regulations.

Laboratory Technician, James Watt College, Greenock, England, 1998-2000. Independent analysis of various experiments to validate and improve on practical methods, assisted student in the use of HPLC, demonstrated and supervised the use of various analytical equipment and maintained comprehensive records of experimental work, tested and calibrated equipment and performed any necessary maintenance.

Education

Bsc(Hons), Chemistry, Manchester Metropolitan University, Manchester, England, 2004

Departmental Diploma, Pure and Applied Chemistry, Strathclyde University, Glasgow, Scotland, 1993.

HnD, Chemistry, Information Technology, Instrumentation, Caldonian University, Glasgow, Scotland, 1992.

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INDIAN TYLER

2007 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position	BUSINESS DEVELOPMENT – 2007 to Present
Responsibilities	Helps lead the sales, marketing and new business development efforts for the Simi Valley, California location. Responsible for new client development, communication of client requirements and acting as a liaison between the client and the laboratory to ensure ongoing improvement of client service.
Experience	<p>Director of Marketing and Sales, Todd International Distribution, Laurel, MD, 2005-2006. Managed and organized sales team and marketing representatives. Developed sale and marketing strategies to increase revenue and profit. Trained sales and marketing staff and implemented innovative sales protocols. Oversaw sales forecasting and created and maintained budgets for the organization.</p> <p>Health and Science Teacher, The Catholic High School, Baltimore, MD, 2002-2003. Conducted health and physical science classes at the high school level. Developed lesson plans and class curriculums for individual classes. Provided detailed instruction and assigned students with projects and coursework and promoted the acceleration of their learning aptitude.</p>
Education	<p>BS, Biology, Morgan State University, Baltimore, MD, 2000.</p> <p>MS, Public Health, Morgan State University, Baltimore, MD, 2002.</p>

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ROGER WONG

2006 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

CHEMIST – 2006 to Present

Responsibilities

Responsible for preparation and analysis of wet and general chemistry samples for turbidity, settleable solids, residue, ion selective electrode analyses (e.g., pH, nitrite, fluoride, and conductivity), hexavalent chromium, and other similar analyses. Additional responsibilities include standard preparation, instrument maintenance, and real time data reduction; participate in peer review process, and good practice of all QA/QC requirements.

Documentation of Demonstration of Capabilities is available for review.

Experience

Chemist, Columbia Analytical Services, Inc., Canoga Park, CA 2003-2006 - Responsible for performing and reporting the assigned tasks by following standard operating procedures. Perform metal digestions for analyses by inductive coupled plasma (ICP), inductive coupled plasma – mass spectrometer (ICP-MS), and graphite furnace atomic absorption (GFAA). Prepared samples for TCLP and STLC extraction. In addition to metals prep, also perform general chemistry analyses, including flash point, chemical oxygen demand (COD), paint filter test, and other ion selective electrode analyses (e.g., pH, nitrite, fluoride, and conductivity).

Education

BS, Biology, UCLA, Los Angeles, CA. December 2003.

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MANUAL "MANNY" ZAMORA

2005 TO PRESENT



Columbia Analytical Services, Inc., 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 (805)-526-7161

Current Position

SAMPLE MANAGEMENT CUSTODIAN – 2005 to Present

Responsibilities

Primary responsibilities include logging in samples and requested analyses, coordination of local courier services, distribution of service request forms to each department, storage and disposal of samples, and shipment of samples to other laboratories. Responsible for evaluating sample receipt compliance against the appropriate method requirements and recording any deviations. Also, maintains calibration and log of thermometers, as well as recording temperatures of all refrigerators and freezers and coordination of local courier services.

Experience

Sample Management Technician – *Columbia Analytical Services, Inc., Canoga Park, CA, 2002-2005.* Responsible for the receipt of groundwater and soil samples into the lab. Maintained proper documentation of sample receipt by following chain-of-custody (COC) procedures. Checked the number of samples received against the COC to account for all the samples. Logged samples into the laboratory; labeled samples; checked pH of preserved samples; and input tests required for each sample into the computerized Laboratory Information Management System (LIMS). Performed courier services (e.g., transported samples or bottle orders between clients and laboratory), field services (e.g., taking field samples for the clients), and bottle order preparation (e.g., adding preservation into bottles and containers for delivery to clients for sampling).

Facilities Assistant – Mailroom, *Xirom, Inc., a division of INTEL, Thousand Oaks, California, 1998-2002.* Responsible for pickup, sorting, and delivery of company mail from the Post Office; administration of computerized shipping system for corporate shipping; assist with daily maintenance of company buildings; stock/purchase office supplies and snacks/drinks for the Company snack machines.

Stockroom Administrator, *American Network Systems, Simi Valley, California, 1997-1998.* Responsible for operation of the warehouse, including receipt/inspection of incoming materials and shipment of product worldwide. Administrative duties included production of export documents required for international shipments; creation of work orders, transfers, new order entry, and monthly inventory report transactions.

Material Handler II - Shipping, *Xirom, Inc., a division of INTEL, Thousand Oaks, California, 1994-1997.* Responsible for daily inventory reports and daily RMA and Sales Order logs. Responsible for all internal material transfers, including freight calculation.

Receiving Clerk, *Hewlett Packard, Eesof Inc., Westlake Village, California, 1992-1994.* Responsible for receipt documentation, and distribution of all deliveries. Coordinated inspection of fabricated materials with Quality Assurance.

Education

COURSEWORK, Business Administration, *Moorpark Community College, Moorpark, California, 1982-1985.*

Arizona Department of Health Services
Office of Laboratory Licensure, Certification & Training
250 North 17th Avenue, Phoenix, AZ 85007

Page: 1

Tuesday, April 3 2007

AZ License: AZ0694

Lab Name: Columbia Analytical Services, Inc.

Lab Director: Mr. John Yokoyama

Phone: (805) 526-7161

Fax: (805) 526-7270

Program	AIR			
	Parameter	EPA Method	Billing Code	Cert Date
	Volatile Organic Compounds	METHOD TO-15	AIR17	06/28/06
Total Licensed Parameters in this Program:		1		

Program	HW			
	Parameter	EPA Method	Billing Code	Cert Date
	Bromide	EPA 9056	NIIIA1	06/28/06
	Chloride	EPA 9056	NIIIA1	06/28/06
	Chromium, Hexavalent	EPA 7196A	MTL4	06/28/06
	Chromium, Hexavalent	EPA 7199	MTL4	06/28/06
	Closed System Purge And Trap Extract. Vocs	EPA 5035A	PREP2	12/05/06
	Corrosivity Ph Determination	EPA 9040C	HAZ1	12/05/06
	Fluoride	EPA 9056	NIIIA1	06/28/06
	Hydrogen Ion (Ph)	EPA 9045D	NIA6	12/05/06
	Nitrate	EPA 9056	NIIIA1	06/28/06
	Nitrite	EPA 9056	NIIIA1	06/28/06
	Nonhalogenated Organics Using Gc/Fid	EPA 8015D	VOC4	12/05/06
	Ortho-Phosphate	EPA 9056	NIIIA1	06/28/06
	Purge And Trap For Aqueous Samples	EPA 5030C	PREP2	12/05/06
	Specific Conductance	EPA 9050A	NIA7	06/28/06
	Sulfate	EPA 9056	NIIIA1	06/28/06
	Vocs By Gc/Ms	EPA 8260B	VOC8	06/28/06
Total Licensed Parameters in this Program: 16				

Program	WW		
Parameter	EPA Method	Billing Code	Cert Date
Bromide	EPA 300.0	NIIIA1	06/28/06
Chloride	EPA 300.0	NIIIA1	06/28/06
Chromium, Hexavalent	SM 3500-CR D	MTL4	06/28/06
Color	SM 2120B	NIA4	12/05/06
Fluoride	EPA 300.0	NIIIA1	06/28/06
Hydrogen Ion (Ph)	SM 4500-H B	NIA6	02/20/07
Nitrate	EPA 300.0	NIIIA1	06/28/06
Nitrite (As N)	EPA 300.0	NIIIA1	06/28/06
Nitrite (As N)	EPA 354.1	NIIB4	06/28/06
Orthophosphate	EPA 300.0	NIIIA1	06/28/06
Purgeables	EPA 624	VOC8	06/28/06
Residue Nonfilterable	SM 2540D	NIIA5	12/05/06
Residue Total	SM 2540B	NIIA4	12/05/06
Residue, Settleable Solids	SM 2540F	NIIA6	06/28/06



OREGON

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM



NELAP Recognized

Columbia Analytical Services, Inc.

CA200007

2655 Park Center Drive, Suite A

Simi Valley, CA 93065

IS GRANTED APPROVAL BY ORELAP UNDER THE 2003 NELAC STANDARDS, TO
PERFORM ANALYSES ON ENVIRONMENTAL SAMPLES IN MATRICES AS LISTED
BELOW:

<i>Air</i>	<i>Drinking Water</i>	<i>Non Potable Water</i>	<i>Solids and Chem. Waste</i>	<i>Tissue</i>
Chemistry				

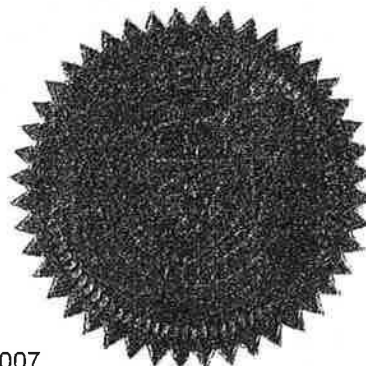
AND AS RECORDED IN THE LIST OF APPROVED ANALYTES, METHODS,
ANALYTIC TECHNIQUES, AND FIELDS OF TESTING ISSUED CONCURRENTLY
WITH THIS CERTIFICATE AND REVISED AS NECESSARY.

ACCREDITED STATUS DEPENDS ON SUCCESSFUL ONGOING PARTICIPATION IN THE PROGRAM AND
CONTINUED COMPLIANCE WITH THE STANDARDS.

CUSTOMERS ARE URGED TO VERIFY THE LABORATORY'S CURRENT ACCREDITATION STATUS IN
OREGON.

Irene E. Ronning

Irene E. Ronning, Ph.D.
ORELAP Administrator
1717 SW 10th
Portland, OR 97201



ISSUE DATE: 5/13/2007

EXPIRATION DATE: 5/12/2008

Certificate No: **CA200007-004**

ORELAP Fields of Accreditation

ORELAPID: CA200007

EPACode: CA00404

Columbia Analytical Services, Inc.

2655 Park Center Drive, Suite A
Simi Valley, CA, 93065

Certificate: CA200007-004

Issue Date: 5/13/2007

Expiration Date: 5/12/2008

As of 5/13/2007 this list supercedes all previous lists for this certificate number.
Cusotmers: Please verify the current accreditation standing with ORELAP.

5765	bis(2-Chloroethyl)ether
4515	bis(Chloromethyl)ether
4395	Bromodichloromethane
4400	Bromoform
4950	Bromomethane (Methyl bromide)
4450	Carbon disulfide
4455	Carbon tetrachloride
7215	Carbonyl sulfide
7235	Catechol
9336	Chloroacetic acid
4475	Chlorobenzene
4485	Chloroethane
4505	Chloroform
105	Chloromethane
4520	Chloromethyl methyl ether
4645	cis-1,2-Dichloroethylene
4680	cis-1,3-Dichloropropene
7325	Cresol/Cresylic acid (mixed isomers)
4555	Cyclohexane
4575	Dibromochloromethane
4625	Dichlorodifluoromethane
154	Dichlorofluoromethane
4650	Dichloromethane (DCM, Methylene chloride)
6080	Diethyl sulfate
7480	Dimethyl carbamoyl chloride
7485	Dimethyl sulfate
4745	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
4760	Ethyl acrylate
6250	Ethyl carbamate (Urethane)
4765	Ethylbenzene
4795	Ethylene oxide
4815	Formaldehyde
3815	Freon-114 (Dichlorotetrafluoroethane)
166	Heptane
4835	Hexachlorobutadiene
4850	Hexane
6320	Isophorone
4930	Methanol
4985	Methyl isobutyl ketone (MIBK)
9498	Methyl isocyanate
4990	Methyl methacrylate
5000	Methyl tert-butyl ether (MTBE)
5245	m-Xylene
5010	n,n-dimethyl formamide
5015	Nitrobenzene
6530	n-Nitrosodimethylamine
6555	n-Nitrosomorpholine
6520	n-Nitroso-n-methylurea
5250	o-Xylene
6625	Phenol
7995	Phosgene



State of Florida
Department of Health, Bureau of Laboratories
This is to certify that

E871020
COLUMBIA ANALYTICAL SERVICES, INC. - SIMI VALLEY
2655 PARK CENTER DRIVE, SUITE A
SIMI VALLEY, CA 91360

has complied with Florida Administrative Code 64E-1,
for the examination of Environmental samples in the following categories
AIR AND EMISSIONS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Laboratories, P.O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

EFFECTIVE July 01, 2007 THROUGH June 30, 2008



A handwritten signature in cursive script.

Max Saltinger, M.D.
Chief, Bureau of Laboratories
Florida Department of Health
DH Form 1697, 7/04
NON-TRANSFERABLE E871020-01-7/1/2007
Supersedes all previously issued certificates

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
Secretary of Health

Laboratory Scope of Accreditation

Page 2 of 2

Attachment to Certificate #: E871020-01, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E871020

EPA Lab Code:

CA01527

(805) 526-7161

E871020

Columbia Analytical Services, Inc. - Simi Valley
2655 Park Center Drive, Suite A
Simi Valley, CA 91360

Matrix: Air and Emissions

Analyte	Method/Tech	Category	Certification Type	Effective Date
Methyl isobutyl ketone (Hexone)	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Methyl methacrylate	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Methyl tert-butyl ether (MTBE)	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Methylene chloride	EPA TO-15	Volatile Organics	NELAP	6/11/2007
n-Heptane	EPA TO-15	Volatile Organics	NELAP	6/11/2007
n-Hexane	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Styrene	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Tetrachloroethylene (Perchloroethylene)	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Toluene	EPA TO-15	Volatile Organics	NELAP	6/11/2007
trans-1,2-Dichloroethylene	EPA TO-15	Volatile Organics	NELAP	6/11/2007
trans-1,3-Dichloropropylene	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Trichloroethene (Trichloroethylene)	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Trichlorofluoromethane	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Vinyl acetate	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Vinyl chloride	EPA TO-15	Volatile Organics	NELAP	6/11/2007
Xylene (total)	EPA TO-15	Volatile Organics	NELAP	6/11/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

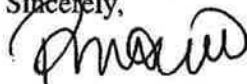
Expiration Date: 6/30/2008

NFESC 413
February 7, 2007

restoration projects. In these circumstances the laboratory's capability to run the tests will be reviewed and the table will be modified accordingly.

Questions concerning the information provided should be directed to the NFESC ER QA Program coordinator, Ms. Patricia Moreno at (805) 982-1659, or via email at pati.moreno@navy.mil.

Sincerely,



For Robert J. Kratzke
Supervisor, Consultation/Information
Management Branch



SOUND DATA

**LABORATORY QUALITY
ASSURANCE PROGRAMS**

AIHA

*Your Essential Connection: Advancing Occupational
and Environmental Health and Safety Globally*

2700 Prosperity Ave., Suite 250, Fairfax, VA 22031 U.S.A.
(703) 849-8888; Fax (703) 207-3561; www.aiha.org

AIHA Laboratory Quality Assurance Programs

SCOPE OF ACCREDITATION

Columbia Analytical Services, Inc.
2665 Park Center Drive, Suite A, Simi Valley, CA 93065-6200

Laboratory ID: 101661
Date Re-Issued: 11/28/2006

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA website at:
<http://www.aiha.org/Content/LOAP/accred/AccreditedLabs.htm>

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 09/01/1994

IHLAP Category	Field of Testing (FoT)	Method	Method Description (for internal methods only)
Core Program Testing	Gas Chromatography	NIOSH 1450	
		NIOSH 1457	
		NIOSH 1500	
		NIOSH 1501	
		NIOSH 1550	
		OSHA 07	

**The laboratory participates in the following AIHA*
or AIHA-approved proficiency testing programs:**

- | | |
|--|---|
| <input type="checkbox"/> Metals* | <input checked="" type="checkbox"/> Organic Solvents* |
| <input type="checkbox"/> Silica* | <input checked="" type="checkbox"/> Diffusive Sampler (3M)* |
| <input type="checkbox"/> Asbestos* | <input type="checkbox"/> Diffusive Sampler (SKC)* |
| <input type="checkbox"/> Bulk Asbestos* | <input type="checkbox"/> Diffusive Sampler (AT)* |
| <input type="checkbox"/> Beryllium* | <input type="checkbox"/> WASP ¹ (Formaldehyde) |
| <input type="checkbox"/> WASP ¹ (Thermal Desorption Tubes) | |
| <input type="checkbox"/> Pharmaceutical Round Robin | |
| <input type="checkbox"/> Compressed/Breathing Air Round Robin | |
| <input type="checkbox"/> NVLAP (determined at the time of site assessment) | |

¹ Workplace Analytical Scheme for Proficiency

New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 07/01/2007 until 06/30/2008



Laboratory Name: COLUMBIA ANALYTICAL SERVICES INC Laboratory Number: CA009 Activity ID: NLC070001
2655 PARK CTR DR
STE A
SIMI VALLEY, CA 93065

Category: CAP03 – Atmospheric Organic Parameters

Eligible to
Report

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Dropped	No	NJ	CAP03.00180	AE	GC/MS, Canisters	[EPA TO-15]	Acetaldehyde
Certified	Yes	NJ	CAP03.00184	AE	GC/MS, Canisters	[EPA TO-15]	Acetone
Applied	No	NJ	CAP03.00185	AE	GC/MS, Canisters	[EPA TO-15]	Acetonitrile
Dropped	No	NJ	CAP03.00190	AE	GC/MS, Canisters	[EPA TO-15]	Acetophenone
Certified	Yes	NJ	CAP03.00195	AE	GC/MS, Canisters	[EPA TO-15]	Acrolein
Dropped	No	NJ	CAP03.00200	AE	GC/MS, Canisters	[EPA TO-15]	Acrylamide
Dropped	No	NJ	CAP03.00205	AE	GC/MS, Canisters	[EPA TO-15]	Acrylic acid
Applied	No	NJ	CAP03.00210	AE	GC/MS, Canisters	[EPA TO-15]	Acrylonitrile
Certified	Yes	NJ	CAP03.00215	AE	GC/MS, Canisters	[EPA TO-15]	Allyl chloride
Certified	Yes	NJ	CAP03.00225	AE	GC/MS, Canisters	[EPA TO-15]	Benzene
Applied	No	NJ	CAP03.00230	AE	GC/MS, Canisters	[EPA TO-15]	Benzyl chloride
Dropped	No	NJ	CAP03.00235	AE	GC/MS, Canisters	[EPA TO-15]	Propiolactone (beta-)
Dropped	No	NJ	CAP03.00240	AE	GC/MS, Canisters	[EPA TO-15]	Bis (2-chloroethyl) ether
Dropped	No	NJ	CAP03.00245	AE	GC/MS, Canisters	[EPA TO-15]	Bis (chloromethyl) ether
Certified	Yes	NJ	CAP03.00250	AE	GC/MS, Canisters	[EPA TO-15]	Bromodichloromethane
Certified	Yes	NJ	CAP03.00255	AE	GC/MS, Canisters	[EPA TO-15]	Bromoform
Certified	Yes	NJ	CAP03.00260	AE	GC/MS, Canisters	[EPA TO-15]	Bromomethane
Certified	Yes	NJ	CAP03.00265	AE	GC/MS, Canisters	[EPA TO-15]	Butadiene (1,3-)
Certified	Yes	NJ	CAP03.00270	AE	GC/MS, Canisters	[EPA TO-15]	Carbon disulfide
Certified	Yes	NJ	CAP03.00275	AE	GC/MS, Canisters	[EPA TO-15]	Carbon tetrachloride
Dropped	No	NJ	CAP03.00280	AE	GC/MS, Canisters	[EPA TO-15]	Carbon oxysulfide (Carbonyl sulfide)
Dropped	No	NJ	CAP03.00285	AE	GC/MS, Canisters	[EPA TO-15]	Catechol
Dropped	No	NJ	CAP03.00295	AE	GC/MS, Canisters	[EPA TO-15]	Chloroacetic acid
Certified	Yes	NJ	CAP03.00300	AE	GC/MS, Canisters	[EPA TO-15]	Chlorobenzene
Certified	Yes	NJ	CAP03.00305	AE	GC/MS, Canisters	[EPA TO-15]	Chloroethane
Certified	Yes	NJ	CAP03.00310	AE	GC/MS, Canisters	[EPA TO-15]	Chloroform
Certified	Yes	NJ	CAP03.00315	AE	GC/MS, Canisters	[EPA TO-15]	Chloromethane
Dropped	No	NJ	CAP03.00320	AE	GC/MS, Canisters	[EPA TO-15]	Chloromethyl methyl ether
Dropped	No	NJ	CAP03.00325	AE	GC/MS, Canisters	[EPA TO-15]	Chlorotoluene (2-)
Dropped	No	NJ	CAP03.00330	AE	GC/MS, Canisters	[EPA TO-15]	Cresols/Cresylic acid
Certified	Yes	NJ	CAP03.00335	AE	GC/MS, Canisters	[EPA TO-15]	Cyclohexane

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
National Environmental Laboratory Accreditation Program
ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS
Effective as of 07/01/2007 until 06/30/2008



Laboratory Name: COLUMBIA ANALYTICAL SERVICES INC Laboratory Number: CA009 Activity ID: NLC070001
2655 PARK CTR DR
STE A
SIMI VALLEY, CA 93065

Category: CAP03 – Atmospheric Organic Parameters

Status	Eligible to Report	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes		NJ	CAP03.00498	AE	GC/MS, Canisters	[EPA TO-15]	Hexanone (2-)
Dropped	No		NJ	CAP03.00500	AE	GC/MS, Canisters	[EPA TO-15]	Heptane (n-)
Dropped	No		NJ	CAP03.00505	AE	GC/MS, Canisters	[EPA TO-15]	Hexane (n-)
Dropped	No		NJ	CAP03.00510	AE	GC/MS, Canisters	[EPA TO-15]	Isophorone
Applied	No		NJ	CAP03.00511	AE	GC/MS, Canisters	[EPA TO-15]	Isopropanol
Applied	No		NJ	CAP03.00515	AE	GC/MS, Canisters	[EPA TO-15]	Isopropylbenzene
Dropped	No		NJ	CAP03.00520	AE	GC/MS, Canisters	[EPA TO-15]	Methyl alcohol (Methanol)
Certified	Yes		NJ	CAP03.00525	AE	GC/MS, Canisters	[EPA TO-15]	Methyl ethyl ketone
Certified	Yes		NJ	CAP03.00535	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isobutyl ketone
Dropped	No		NJ	CAP03.00540	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isocyanate
Certified	Yes		NJ	CAP03.00545	AE	GC/MS, Canisters	[EPA TO-15]	Methyl methacrylate
Certified	Yes		NJ	CAP03.00550	AE	GC/MS, Canisters	[EPA TO-15]	Methyl tert-butyl ether
Certified	Yes		NJ	CAP03.00555	AE	GC/MS, Canisters	[EPA TO-15]	Methylene chloride (Dichloromethane)
Dropped	No		NJ	CAP03.00565	AE	GC/MS, Canisters	[EPA TO-15]	Methylphenol (2-)
Dropped	No		NJ	CAP03.00570	AE	GC/MS, Canisters	[EPA TO-15]	Nitrobenzene
Dropped	No		NJ	CAP03.00575	AE	GC/MS, Canisters	[EPA TO-15]	Nitropropane (2-)
Dropped	No		NJ	CAP03.00580	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitrosodimethylamine
Dropped	No		NJ	CAP03.00585	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitrosomorpholine
Dropped	No		NJ	CAP03.00590	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitroso-N-methylurea
Dropped	No		NJ	CAP03.00595	AE	GC/MS, Canisters	[EPA TO-15]	Phenol
Dropped	No		NJ	CAP03.00600	AE	GC/MS, Canisters	[EPA TO-15]	Phosgene
Dropped	No		NJ	CAP03.00605	AE	GC/MS, Canisters	[EPA TO-15]	Propionaldehyde
Applied	No		NJ	CAP03.00612	AE	GC/MS, Canisters	[EPA TO-15]	Propylene
Dropped	No		NJ	CAP03.00615	AE	GC/MS, Canisters	[EPA TO-15]	Propylene oxide
Dropped	No		NJ	CAP03.00620	AE	GC/MS, Canisters	[EPA TO-15]	Propane sulfone (1,3-)
Certified	Yes		NJ	CAP03.00625	AE	GC/MS, Canisters	[EPA TO-15]	Styrene
Dropped	No		NJ	CAP03.00630	AE	GC/MS, Canisters	[EPA TO-15]	Styrene oxide
Certified	Yes		NJ	CAP03.00635	AE	GC/MS, Canisters	[EPA TO-15]	Trichlorobenzene (1,2,4-)
Certified	Yes		NJ	CAP03.00640	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,3,5-)
Certified	Yes		NJ	CAP03.00645	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,2,4-)
Certified	Yes		NJ	CAP03.00650	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylpentane (2,2,4-)
Applied	No		NJ	CAP03.00652	AE	GC/MS, Canisters	[EPA TO-15]	Tert-butyl alcohol

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection
Environmental Laboratory Certification Program
LABORATORY PERSONNEL LIST

Effective as of: 07/01/2007

Laboratory Name: TESTAMERICA ANALYTICAL TESTING CORP ORLANDO Laboratory Number: FL009 Activity ID: NLC070001
4310 EAST ANDERSON RD
ORLANDO, FL 32812

Position: Lead Tech. Director		Start Date	End Date	Documentation Status	Complete Date	Comments
Employee	Category/Instrument					
ENID ORTIZ		2/14/2005		Complete/Qualified		
Position: Manager		Start Date	End Date	Documentation Status	Complete Date	Comments
Employee	Category/Instrument					
KEITH BLANCHARD		6/3/2004		Complete/Qualified		
Position: QA Officer		Start Date	End Date	Documentation Status	Complete Date	Comments
Employee	Category/Instrument					
LORI MANGRUM		4/20/2004		Complete/Qualified		
Position: Supervisor/Tech Dir		Start Date	End Date	Documentation Status	Complete Date	Comments
Employee	Category/Instrument					
ANARIS CRESPO	SDW02, WPP02, CAP01 or CAP04	1/16/2007		Complete/Qualified		
ANARIS CRESPO	SDW03, WPP03 or SHW03	1/16/2007		Complete/Qualified		
ANARIS CRESPO	SDW04, WPP04, SHW04, 09, 10 or CAP02	1/16/2007		Complete/Qualified		
JOHN SHANHOLTZER	SDW05, 06, WPP05-07, SHW05-12 or CAP03	1/7/2004		Complete/Qualified		

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
RICHARD F. DAINES, M.D.



Expires 12:01 AM April 01, 2008
Issued April 01, 2007

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. MICHAEL TUDAY
COLUMBIA ANALYTICAL SERVICES INC. -SIMI VALLEY
2655 PARK CENTER DR, SUITE A
SIMI VALLEY, CA 93065

NY Lab Id No: 11221
EPA Lab Code: CA00404

*is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below:*

Volatile Organics

1,3-Butadiene	EPA TO-15
1,4-Dioxane	EPA TO-15
2-Butanone (Methylethyl ketone)	EPA TO-15
Acetone	EPA TO-15
Carbon Disulfide	EPA TO-15
Hexane	EPA TO-15
Methyl tert-butyl ether	EPA TO-15
Vinyl acetate	EPA TO-15

Serial No.: 32757

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (516) 485-5570 to verify laboratory's accreditation status.



DELPHI

November 30, 2007

Mr. Richard Karl
Director, Superfund Division
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago IL 60604-3590

via FedEx

Ms. Maria Gonzalez
Associate Regional Counsel
U.S. EPA Region 5
77 West Jackson Blvd., C-14J
Chicago IL 60604-3590

SUBJECT: Superfund Site B5KG, Docket VW-08C-884
Payment of Past Response Costs
Delphi VOC Plume Site (Home Avenue)
Dayton, Montgomery County, Ohio

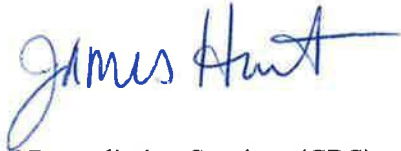
Dear Mr. Karl and Ms. Gonzalez:

Pursuant to the stipulated requirements of Administrative Order on Consent, Docket No. VW-08C-884, Section XV.38, please be advised that payment in the amount of \$1,696.61 was made for past response costs on 11/30/07 via www.pay.gov.

Enclosed is a copy of online payment confirmation. The www.pay.gov tracking number is 24UEPURG. The agency tracking number is 74036607974.

Please contact me if you have questions or require further assistance.

Sincerely,



James Hunt
Manager, Global Remediation Services (GRS)
Operations Support Group (OSG)
Delphi Corporation, World Headquarters and Customer Center
5825 Delphi Drive, Mail Code: 480-410-186,
Troy, Michigan USA 48098
Phone: +1 248.813.1428, Fax +1 248.813.1433
Mobile: +1 248.813.1428, james.hunt@delphi.com

Delphi Operations Support Group
World Headquarters and Customer Center
5825 Delphi Drive, Troy, Michigan 48098-2815 USA

Online Payment**Step 3: Confirm Payment****1 | 2 | 3****Thank you.****Your transaction has been successfully completed.****Pay.gov Tracking Information****Application Name:** EPA Miscellaneous Payments**Pay.gov Tracking ID:** 24UEPURG**Agency Tracking ID:** 74036607974**Transaction Date and Time:** 11/30/2007 16:14 EST**Payment Summary****Address Information****Account Holder Name:** JAMES HUNT

5825 DELPHI

Billing Address: DRIVE**Billing Address****2:****City:** TROY**State / Province:****Zip / Postal****Code:** 48098**Country:** USA**Account Information****Card Type:** Master Card**Card Number:** *****9139**Expiration Date:** 11 / 2009**Payment Information****Payment Amount:** \$1,696.61**Transaction Date** 11/30/2007
and Time: 16:14 EST

DELPHI

January 17, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. EPA, Region 5
Emergency Response Branch
Command Post
919 N. Keowee Street
Dayton, OH 45404

RE: Summary of Best Efforts to Reach Non-Responsive Homeowners

Dear Mr. Renninger,

In accordance with Delphi's Phase I and Phase II Work Plans, per the Order on Consent for the Delphi Home Avenue Site, Delphi has completed its best efforts to procure access agreements from homeowners in designated areas to conduct baseline indoor air and sub-slab soil vapor sampling. Despite these best efforts, nine (9) homeowners have not agreed to allow Delphi to conduct this work. Attached is a table identifying the nine subject properties, descriptions of the residential structures, descriptions of the best efforts to reach the homeowners for access agreements, and any relevant comments. At a minimum, Delphi has sent two certified letters via U.S. Mail, and as you can see, has tried up to six times to reach several of these homeowners using a combination of certified mail, priority mail with delivery confirmation, door hangers and phone calls.

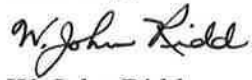
In addition, Ex. 6 P... Names, Addresses and pho... and Ex. 6 P... Names, Addresses and ph... have recently been sold. Delphi has sent one certified letter to each of these new owners, and will make a second attempt via certified mail on January 18, 2008.

The most recent certified mail letters to the 9 properties, shown on the attached table, were sent in two groups on December 11 and 18, 2007. This packet contained the "2nd Request to Sample" letter from Delphi with "Permission to Sample" and "Declination Statement" forms. Delphi's letter requested the homeowner sign only one of the two forms and return it in the stamped, addressed envelope, which was included in the packet. The letter also stated, that no response from the homeowner within 30 days would indicate that the homeowner does not want to participate in the sampling program and that Delphi would not attempt to contact them again. The 30-day period ended on January 10 and January 17, 2008, respectively. At this time, Delphi will cease trying to reach these 9 homeowners.

If the U.S. EPA is able to facilitate these homeowners signing a Delphi access agreement for baseline indoor air and sub-slab sampling, Delphi is willing to conduct the actual sampling and handle all future communications with the homeowner thereafter.

Please do not hesitate to contact me at (937) 455-0941 if you have any questions about the attached table.

Sincerely,

A handwritten signature in black ink that reads "W. John Ridd". The signature is written in a cursive, flowing style.

W. John Ridd
Project Manager

Enclosure

C: Bethany Dale, ETC
 Susan Hoertt, Haley & Aldrich
 Mark Case, Public Health – Dayton & Montgomery County

TABLE 1
DELPHI VOC PLUME SITE
PHASE II COMMUNITY OUTREACH
SUMMARY OF BEST EFFORTS TO OBTAIN PERMISSION FOR BASELINE SAMPLING
NON-RESPONSIVE ADDRESSES

Street Number	Street Name	Description of Residential Structure	Property Owner's Name*	Property Owner's Address	Description of Best Efforts to Reach Property Owner for Access Agreement	Comments
400	[REDACTED]	Single family structure	JP Morgan Bank, Trustee	[REDACTED] San Diego, CA 92123	1st Attempt - 10/31/07 - Certified Letter 2nd Attempt - 12/11/07 - Certified Letter	
400	[REDACTED]	Single family structure	[REDACTED]	same	1st Attempt - 10/31/07 - Certified Letter (undeliverable) 2nd Attempt - 12/11/07 - Certified Letter (undeliverable, vacant)	
400	[REDACTED]	Single family structure	[REDACTED]	same	1st Attempt - 10/26/07 - Certified Letter (undeliverable) 2nd Attempt - 12/18/07 - Certified Letter (undeliverable, vacant)	At time of last reconnaissance, house was vacant and had notices on the window. Also reported in City's Nuisance Program.
400	[REDACTED]	Single family structure	[REDACTED]	same	1st Attempt - 4/11/07 - Letter, Priority Mail w/delivery confirmation 2nd Attempt - 4/20/07 - Letter, Priority Mail w/delivery confirmation 3rd Attempt - 5/02/07 - Door Hanger 4th Attempt - 5/18/07 - Door Hanger 5th Attempt - 10/26/07 - Certified Letter (undeliverable) 6th Attempt - 12/18/07 - Certified Letter	Rollover address from Phase I.
400	[REDACTED]	Single family structure	[REDACTED]	[REDACTED] Dayton, OH 45417	1st Attempt - 4/11/07 - Letter, Priority Mail w/delivery confirmation 2nd Attempt - 4/20/07 - Letter, Priority Mail w/delivery confirmation 3rd Attempt - 5/02/07 - Door Hanger 4th Attempt - 5/18/07 - Door Hanger 5th Attempt - 10/26/07 - Certified Letter (undeliverable) 6th Attempt - 12/18/07 - Certified Letter (undeliverable, vacant)	Rollover address from Phase I.
400	[REDACTED]	Single family structure	[REDACTED]	[REDACTED] Dayton, OH 45406	1st Attempt - 10/31/07 - Certified Letter 2nd Attempt - 12/11/07 - Certified Letter	
400	[REDACTED]	Two-family structure	[REDACTED]	[REDACTED] Dayton, OH 45402	1st Attempt - 10/31/07 - Certified Letter 2nd Attempt - 12/11/07 - Certified Letter	
400	[REDACTED]	Two-family structure	[REDACTED]	[REDACTED] Dayton, OH 45417	1st Attempt - 4/11/07 - Letter, Priority Mail w/delivery confirmation 2nd Attempt - 4/15-18/07 - Phone calls, left 3 messages 3rd Attempt - 4/18/07 - Letter to schedule sampling 4th Attempt - 10/26/07 - Certified Letter (undeliverable) 5th Attempt - 12/18/07 - Certified Letter (undeliverable, vacant)	Rollover address from Phase I. Received signed access agreement on 4/14/07, but homeowner could not be reached to schedule sampling. House is reportedly going through foreclosure process.
400	[REDACTED]	Single family structure	[REDACTED]	[REDACTED] Dayton, OH 45434	1st Attempt - 10/31/07 - Certified Letter 2nd Attempt - 12/11/07 - Certified Letter	

* Property Owners' Names and Addresses were obtained from Montgomery County Recorder's Office.

DELPHI

February 21, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. EPA, Region 5
Emergency Response Branch
Command Post
919 N. Keowee Street
Dayton, OH 45404

RE: Summary of Best Efforts to Reach Two Additional Non-Responsive Homeowners

Dear Mr. Renninger,

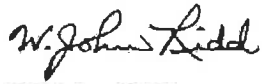
In accordance with Delphi's Phase I and Phase II Work Plans, per the Order on Consent for the Delphi Home Avenue Site, Delphi has completed its best efforts to procure access agreements from homeowners in designated areas to conduct baseline indoor air and sub-slab soil vapor sampling. Despite these best efforts, owners of two (2) additional properties have not agreed to allow Delphi to conduct this work. According to Montgomery County property records, these two properties, **Ex. 6 P... Names, Addresses an...** and **Ex...** **Ex. 6 P... Names, Address...** were sold in November 2007. Delphi sent two certified letters to each of the new owners, in addition to making attempts to reach the previous owners before the sales of the properties. Attached is a table identifying the two subject properties, descriptions of the residential structures, descriptions of Delphi's best efforts to reach the homeowners for access agreements, and any relevant comments.

The most recent certified mail letters were sent on January 18, 2008. This packet contained the "2nd Request to Sample" letter from Delphi with "Permission to Sample" and "Declination Statement" forms. Delphi's letter requested the homeowner sign only one of the two forms and return it in the stamped, addressed envelope, which was included in the packet. The letter also stated, that no response from the homeowner within 30 days would indicate that the homeowner does not want to participate in the sampling program and that Delphi would not attempt to contact them again. The 30-day period ended on February 17, 2008. At this time, Delphi will cease trying to reach these two homeowners.

If the U.S. EPA/Public Health – Dayton & Montgomery County is able to facilitate these homeowners signing a Delphi access agreement for baseline indoor air and sub-slab sampling, Delphi is willing to conduct the actual sampling and handle all future communications with the homeowner thereafter.

Please do not hesitate to contact me at (937) 455-0941 if you have any questions about the attached table.

Sincerely,

A handwritten signature in black ink, appearing to read "W. John Ridd". The signature is fluid and cursive, with the first name "W. John" and the last name "Ridd" clearly distinguishable.

W. John Ridd
Project Manager

Enclosure

C: Bethany Dale, ETC
Susan Hoertt, Haley & Aldrich
Mark Case, Public Health – Dayton & Montgomery County

TABLE 1
DELPHI VOC PLUME SITE
PHASE II COMMUNITY OUTREACH
SUMMARY OF BEST EFFORTS TO OBTAIN PERMISSION FOR BASELINE SAMPLING
TWO NON-RESPONSIVE ADDRESSES

Street Number	Street Name	Description of Residential Structure	Property Owner's Name*	Property Owner's Address	Description of Best Efforts to Reach Property Owner for Access Agreement	Comments
10	Dayton, OH 45417	Single Family		Dayton, OH 45408	1st Attempt - Certified Letter 10/31/07 (previous owner) 2nd Attempt - Phone Call 11/29/07 (previous owner) 1st Attempt - Certified Letter 12/07/07 (new owner) 2nd Attempt - Certified Letter 1/18/08 (new owner) (undeliverable, unclaimed)	Montgomery County records indicate property was sold on 11/28/07.
10	Dayton, OH 45417	Single Family		Dayton, OH 45417	1st Attempt - Certified Letter 10/31/07 (previous owner) 1st Attempt - Certified Letter 12/17/07 (new owner) (undeliverable, vacant) 2nd Attempt - Certified Letter 1/18/08 (new owner) (undeliverable, vacant)	Montgomery County records indicate property was sold on 11/27/07.

* Property Owners' Names and Addresses were obtained from Montgomery County Recorder's Office.

DELPHI

May 23, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Emergency Response Branch Command Post
919 N. Keowee Street
Dayton, OH 45404

Re: Delphi Home Avenue VOC Plume Site
Phase II Work Plan Addendum

Dear Mr. Renninger:

Pursuant to our discussions during our face-to-face meeting on April 24, 2008 and subsequent discussions during Delphi Home Avenue VOC Plume Site Technical Committee meetings (May 1, 2008 and May 8, 2008), Delphi will add one property to the approved Phase II study area. In accordance with the approved Phase II Work Plan, Delphi must obtain written permission from the owner of this property prior to performing any sampling activities. If written permission to sample is obtained from the property owner, Delphi will collect samples in accordance with the approved Phase II Work Plan.

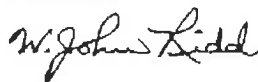
Additionally, as agreed between U.S. EPA and Delphi, a sub-slab soil vapor sample has been collected from each of two selected structures located in the approved Phase II study area and included in the City of Dayton's Nuisance Abatement program. Due to the dilapidated condition of these structures, with doors and windows broken or missing, no indoor air samples were collected.

Delphi understands that U.S. EPA will accept the data collected from the two nuisance structures and the newly added property in determining the extent of impact in the study area.

In accordance with Section VIII of the Administrative Order on Consent, Delphi is requesting your approval of this Phase II Work Plan Addendum.

Please contact me if you have any questions concerning the enclosed materials.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosures

Table 1 - Phase II Property Addresses, Addendum

c: Susan Hoertt, Haley & Aldrich, Inc.

DELPHI

May 23, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Emergency Response Branch Command Post
919 N. Keowee Street
Dayton, OH 45404

Re: Delphi Home Avenue VOC Plume Site
Phase II Work Plan Addendum

Dear Mr. Renninger:

Pursuant to our discussions during our face-to-face meeting on April 24, 2008 and subsequent discussions during Delphi Home Avenue VOC Plume Site Technical Committee meetings (May 1, 2008 and May 8, 2008), Delphi will add one property to the approved Phase II study area. In accordance with the approved Phase II Work Plan, Delphi must obtain written permission from the owner of this property prior to performing any sampling activities. If written permission to sample is obtained from the property owner, Delphi will collect samples in accordance with the approved Phase II Work Plan.

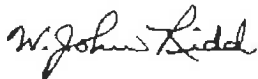
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Delphi understands that U.S. EPA will accept the data collected from the two nuisance structures and the newly added property in determining the extent of impact in the study area.

In accordance with Section VIII of the Administrative Order on Consent, Delphi is requesting your approval of this Phase II Work Plan Addendum.

Please contact me if you have any questions concerning the enclosed materials.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosures

Table 1 - Phase II Property Addresses, Addendum

c: Susan Hoertt, Haley & Aldrich, Inc.

TABLE 1
PHASE II INDOOR AIR SAMPLING MITIGATION
PROPERTY ADDRESSES
DELPHI VOC PLUME SITE
ADDENDUM

Street Number	Street Name	Description of Residential Structure	Comments
Ex...	Ex. 6 P... N...	Single family structure	
E...	Ex. 6 P... Na...	Single family structure	
E...	Ex. 6 P... N...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 - 1...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... ...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... ...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... ...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
Ex....	Ex. 6 P... Names, ...	Two-family structure	
E...	Ex. 6 P... Names, ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
Ex. ...	Ex. 6 P... Names, ...	Two-family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... Names, ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... Names, ...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
Ex. ...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
Ex....	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	

Kirkland, Randy

From: Renninger.Steven@epamail.epa.gov
Sent: Thursday, July 24, 2008 12:56 PM
To: Kirkland, Randy
Subject: Fw: Nuisance Abatement Addresses

Print for the site file.

Steve Renninger, On-Scene Coordinator
U.S. EPA Region V
Emergency Response Branch
26 West Martin Luther King Drive (G41)
Cincinnati, OH 45268
Phone: 513-569-7539
Fax: 513-487-2102
Cell: 513-260-7849
email: renninger.steven@epa.gov

----- Forwarded by Steven Renninger/CI/USEPA/US on 07/24/2008 12:55 PM

"Graham,
Felicia"
<Felicia.Graham@
ci.dayton.oh.us>

07/24/2008 11:15
AM

To
Steven Renninger/CI/USEPA/US@EPA,
<MCase@phdmc.org>,
<SHoertt@haleyaldrich.com>

cc

"Winchester, Donna"
<Donna.Winchester@ci.dayton.oh.us
>, "Shoemaker, James"
<James.Shoemaker@ci.dayton.oh.us>

Subject

Nuisance Abatement Addresses

Hello!

Below are the addresses that I was asked to get a status on from Housing.

The following are in the Nuisance Abatement Program but have not been scheduled for demolition. The Nuisance Abatement Program's goal is to pressure the owner to repair the property and if no progress, then the property is demolished. This process can take anywhere from a couple of months to several years depending on the property. For those properties that the City has boarded, the City has control of them and can allow access. The Housing Inspector for this area is Mark Mueller (333-3949).

Ex. 6 P... Names, Addresse... Addresses in Program:

Ex. 6 Pr... Names, Addresses and phone numbers redacted

Addresses not in Program:

Ex. 6 P... Names, Addresses and ...

I will not be available for today's call but Jim Shoemaker will be sitting in. If you have any questions please feel free to contact me.
Thanks.

Felicia Graham
Environmental Scientist
Division of Environmental Management
City of Dayton - Water

Tel: (937)333-8598
Fax: (937)333-2833
felicia.graham@cityofdayton.org

DELPHI

July 31, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Emergency Response Branch Command Post
919 N. Keowee Street
Dayton, OH 45404

Re: Delphi Home Avenue VOC Plume Site
Phase II Work Plan Addendum

Dear Mr. Renninger:

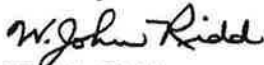
Pursuant to our discussions during the 24 July 2008 Delphi Home Avenue VOC Plume Site Technical Committee meeting, Delphi will add one additional property to the approved Phase II study area. The property is an uninhabited residential structure located to the north of the Phase II study area, on the west side of South Ardmore Avenue. The property is currently included in the City of Dayton's Nuisance Abatement program and its windows and doors have been boarded by the City of Dayton Department of Building Services. The City of Dayton Department of Building Services has agreed to assist Delphi and its contractors in gaining access to the structure.

As agreed between U.S. EPA and Delphi, the sampling event will consist of collection of one sub-slab soil vapor sample from beneath the structure. Delphi understands that U.S. EPA will accept the data collected from this nuisance structure in completing delineation of the extent of impact associated with the Delphi Home Avenue VOC Plume Site.

In accordance with Section VIII of the Administrative Order on Consent, Delphi is requesting your approval of this Phase II Work Plan Addendum.

Please contact me if you have any questions concerning the enclosed materials.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosures

Table 1 - Phase II Property Addresses, Addendum, July 2008

c: Susan Hoertt, Haley & Aldrich, Inc.

TABLE 1
PHASE II INDOOR AIR SAMPLING MITIGATION
PROPERTY ADDRESSES
DELPHI VOC PLUME SITE
ADDENDUM

Street Number	Street Name	Description of Residential Structure	Comments
E...	Ex. 6 P... N...	Single family structure	
E...	Ex. 6 P... Na...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program. Sampling approved as part of U.S. EPA-approved May 2008 Phase II Work Plan Addendum.
Ex. ...	Ex. 6 P... ...	Single family structure	
E...	Ex. 6 - 1...	Single family structure	
Ex...	Ex. 6 P... ...	Single family structure	
E...	Ex. 6 P... ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program. Sampling approved as part of U.S. EPA-approved May 2008 Phase II Work Plan Addendum.
E...	Ex. 6 P... ...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 - 1...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... ...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
Ex...	Ex. 6 P... Names,...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program. Added in July 2008 Phase II Work Plan Addendum.
E...	Ex. 6 P... Names,...	Single family structure	Sampling approved as part of U.S. EPA-approved May 2008 Phase II Work Plan Addendum.
E...	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
Ex. ...	Ex. 6 P... Names,...	Two-family structure	
E...	Ex. 6 P... Names,...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
Ex. ...	Ex. 6 P... Names,...	Two-family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... Names,...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... Names, ...	Single family structure	Structure appears to be uninhabitable
Ex....	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	
Ex...	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	
E...	Ex. 6 P... Names,...	Single family structure	
Ex...	Ex. 6 P... Names, ...	Single family structure	



Thomas C. Woods
Regional Director,
Government & Community Relations

September 4, 2008

Mr. Ellis Jacobs
Advocates for Basic Legal Equity, Inc.
333 W. First Street
Suite 500 B
Dayton, OH 45402

Dear Mr. Jacobs,

Thank you for your letter of August 12, 2008, regarding the house at [Ex. 6 P... Names, Addresses ...] in Dayton, Ohio, that is owned by [Ex. 6 P... Names, Add...]. You suggest that it be retested for the chemical vapors of interest in the environmental testing program that Delphi is conducting in the area.

The purpose of this environmental testing program is to determine the extent to which chemical vapors, specifically trichloroethylene (TCE), perchloroethylene (PCE) and chloroform, may have moved through the soil from our property on Home Avenue, and whether vapors from these chemicals are entering houses in the adjacent neighborhood.

This program is being conducted under an Administrative Order on Consent (Order) issued by the U.S. Environmental Protection Agency (U.S. EPA) and signed by Delphi in November 2007. All work performed under the Order is being conducted pursuant to a Work Plan approved by the U.S. EPA, with prescribed sampling protocol and decision criteria. Indoor air and sub-slab soil vapor data collected as part of this environmental testing program are evaluated against conservative health-based screening levels established by the Ohio Department of Health (ODH). These screening levels are considered by the ODH and the Agency for Toxic Substances Disease Registry (ATSDR) to be protective of public health, and are consistent with screening levels established for similar U.S. EPA investigations at other sites in Ohio. All activity conducted under this program is reviewed in advance and approved by the U.S. EPA in consultation with the ODH and Public Health - Dayton & Montgomery County (PHDMC).

The test results of the indoor air and sub-slab soil vapor samples collected by our contractor, Haley & Aldrich, from the house located at 34 Cowart Avenue are all below the screening levels established by the ODH. Based on these results, the U.S. EPA, ODH and PHDMC concluded that no further action is necessary at this property.

In your letter, you indicate that, "Mr. Boyd informed us that indoor air and soil vapor samples were taken from his neighbors' homes, and the results show levels above the action level." In reality, the test results for the houses neighboring Mr. Boyd's to the north, south and east (a parking lot is located to the west) are all below the screening levels for each of the three chemicals of interest. Thus, the U.S. EPA and ODH concluded that none of these houses requires further action.

We believe the Order and Work Plan prescribe a process that is rigorous, robust, conservative, scientifically sound and consistent with other such programs underway elsewhere in Ohio. We do not believe it would be appropriate to deviate from the prescribed testing protocol.

Again, thank you for your interest and for contacting us.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Woods", with a large, sweeping loop at the top.

Thomas C. Woods
Regional Director,
Government & Community Relations

c: Mr. Fred Boyd
Mr. Steve Renninger, U.S. Environmental Protection Agency
Mr. Bob Frey, Ohio Department of Health
Mr. Mark Case, Public Health - Dayton & Montgomery County

DELPHI CORPORATION RESPONSES

Delphi Questions

1. Should/Can you grow vegetables in the soil? What is the risk?
2. Will there be any testing of residents in the neighborhoods surrounding the Plant?
3. What type of tests should one have done to see if any of the chemicals found in the area are in their bodies and or are affecting their health?
4. What is being done to get permission from other property owners in the test area to have their properties tested? How was the test area determined?
5. Have Delphi employees been tested?

DELPHI RESPONSE: Employee exposure to chemicals in the workplace is regulated by the Occupational Safety & Health Administration (OSHA) of the U.S. Department of Labor. Delphi is and has been in compliance with OSHA regulations and is subject to inspection by OSHA.

6. Will soil tests be available to all local residents outside of the CT 40?
7. What radius was affected?
8. What studies show that the chemicals (PCE, etc.) are destroyed and not just re-circulated in the community during mitigation efforts?
9. Was/Is there air contamination during the mitigations?
10. How does the intrusion vary from house to house without basements (slab style homes)?
11. What test can be done at the doctor's office to show whether you have been exposed to these chemicals (PCE. Etc.?)
12. Are these tests available to doctors/laboratories?
13. The Health Statistic Review doesn't tell us whether a health effect is caused by exposure, whether an exposure is associated with a health effect in the future, or whether a person will develop a health condition in the future. Is there any information/study that can?
14. If you knew of the contamination in 2005 why weren't we informed until 2007?

DELPHI RESPONSE: Delphi started collecting samples from public property in the neighborhood, such as city streets, alleys and right-of-ways, in May 2005-2006. Before collecting these samples in 2005, Delphi met with the Ohio EPA and Public Health – Dayton & Montgomery County (previously named the Montgomery County Combined Health District) in April 2005. Delphi also met with the Southwest Priority Board in May 2005 to inform them of the issue and our investigation plans, and to solicit their support in communication with the community. The Southwest Priority Board supported the testing and cosigned a community letter dated May 26, 2005 informing residents of the environmental testing on public property. In addition to that notification, community door hangers were left on residential homes in June and December 2005 and again in September 2006.

Delphi shared sampling results in meetings with Ohio EPA in June 2005 and PHDMC in July 2005. We updated the City of Dayton and the Southwest Priority Board in separate meetings in November 2005.

Delphi began testing residential properties in the area in April 2007, at which time the neighbors were asked to sign access agreements to allow Delphi and/or the U.S. EPA to test their homes.

15. This toxic concern was present before 2003. Properties were bought and sold in 2003 and after without giving buyers disclosure of this spill. In view of this fact, what opportunities are there or will there be a requirement to have Delphi buy out residents due to the violation of full disclosure?

DELPHI RESPONSE: Please see reply to Question #14. Fortunately environmental situations of this nature and scope do not require the relocation of occupants or buy-outs of house owners.

16. Whatever is determined that needs to happen, why do residents have to stay in the area? Can you relocate residents from the toxic environment?

DELPHI RESPONSE: The extensive environmental testing that has been performed in the area, and the health study conducted by the Ohio Department of Health and the U.S. Department of Health and Human Services' Agency for Toxic Substances and Disease Registry, indicate that the environment is not toxic. Fortunately environmental situations of this nature and scope do not require the relocation of occupants.

17. If you have determined that someone has been contaminated from the exposure, what will Delphi do for those individuals who have contracted cancer from the exposure? Are you (Delphi) going to pay for their healthcare?....during their illness? What are the limitations?

DELPHI RESPONSE: Delphi is unaware of any occupant of the houses tested having contracted cancer from exposure to any of the chemical vapors of interest. Were credible medical/scientific information substantiating such a claim brought to our attention, we of course would take it very seriously and look into it very thoroughly.

18. There have been 3 other meetings of this kind. In each case, there has been no indication of what is going to be done for the residents in the area. Delphi needs to be held accountable for what has happened. Can Delphi buy out residents as a result of the contamination/exposure? What other information can be shared to address the concerns of the residents?

DELPHI RESPONSE: As has been explained and discussed in all of the public meetings and related forums, Delphi has: (1) had testing performed to determine the extent to which the chemical vapors of interest may have moved from the Delphi site through the soil and into the adjacent neighborhood; (2) had testing performed to determine whether any of the chemical vapors of interest had intruded into any houses; (3) continued to monitor the air in houses that tested above the screening level for further monitoring; and, (4) installed mitigation systems in houses that tested above the screening level for mitigation (and is continuing to have the air in those houses monitored).

As a result, the U.S. Environmental Protection Agency and Ohio Department of Health have determined that none of these houses has air that is presenting a human health concern.

In addition, Delphi has installed a soil vapor extraction system on its property that is drawing vapors from the soil and preventing them from moving into the adjacent neighborhood. The system operates 24 hours a day, seven days a week. It is proving to be very effective in cleaning vapors from the soil on the Delphi site and in preventing vapors from moving into the adjacent neighborhood. This is evidenced by the fact that the levels of the chemical vapors of interest in the neighborhood soil continue to decrease substantially. Delphi will operate the system until it is no longer needed.

As Delphi has explained in response to questions at the public meetings and related forums, fortunately environmental situations of this nature and scope do not require the relocation of occupants or buy-outs of house owners.

- 19. How closely does CT40 resemble the Delphi Study area?*
- 20. Are there any precursors to the specific types of cancers caused by the chemicals of concern?*
- 21. Since the liver is the primary target, are there ways to test that organ?*
- 22. How does the vapor abatement system discharge affect the air quality?*
- 23. What about the people who have moved from the area? Will they be located and tested?*
- 24. What information can be shared regarding the Jackson School site? Some levels of contamination have been found and there have been reports of illnesses by people in that building.*

Kirkland, Randy

From: Renninger.Steven@epamail.epa.gov
Sent: Friday, April 24, 2009 4:17 PM
To: Kirkland, Randy
Subject: Fw: Delphi VOC Plume Site, OH - Site No. B5KG - Response Costs Activity
Attachments: DOC001.pdf

Please print email and pdf file for the Delphi correspondence file.

Thanks.

Steve Renninger, On-Scene Coordinator
U.S. EPA Region V
Emergency Response Branch
26 West Martin Luther King Drive (G41)
Cincinnati, OH 45268
Phone: 513-569-7539
Cell: 513-260-7849

email: renninger.steven@epa.gov

----- Forwarded by Steven Renninger/CI/USEPA/US on 04/24/2009 04:15 PM

"Hunt, James "
<james.hunt@delp
hi.com>

04/24/2009 02:30
PM

To
Steven Renninger/CI/USEPA/US@EPA,
Maria Gonzalez/R5/USEPA/US@EPA,
Richard Hackley/R5/USEPA/US@EPA,
Linda Haile/R5/USEPA/US@EPA,
"Hester, Mark A"
<mark.a.hester@delphi.com>,
"Howarth, Glenn "
<glenn.howarth@delphi.com>,
"Ridd, John "
<john.ridd@delphi.com>

cc

Subject
Delphi VOC Plume Site, OH - Site
No. B5KG - Response Costs
Activity

Please note the attached record of payment for Response Costs Activity that is being sent via Federal Express (Tracking number 8651 8821 3326).

Delphi Check number is 0900760404, in the amount of \$115,451.61. Delphi was unable to complete an Electronic Funds transfer.

<<DOC001.pdf>>

Yours truly,>>

Jim Hunt

Manager, Global Remediation Services (GRS)

Operations Support Group (OSG)

Delphi Corporation, World & North American Headquarters

5725 Delphi Drive, Mail Code: 480-410-186,

Troy, Michigan USA 48098-2815

Phone: +1 248.813.1428, Fax +1 248.813.1599

Mobile: +1 248.953.1173, james.hunt@delphi.com

DELPHI

Innovation for the Real World

www.delphi.com(See attached file: DOC001.pdf)

DELPHI

April 24, 2009

U.S. Bank
Government Lockbox 979076
US EPA Superfund Payments
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101

Re: Delphi VOC Plume Site, OH
Site No. B5KG

To Whom It May Concern:

Attached, please find Delphi's check in the amount of \$115,451.61 for recovery costs incurred by the U.S Environmental Protection Agency (EPA) for response costs activity, for the period November 6, 2007 through November 5, 2008. This bill was received by our office on February 26, 2009 and was based upon the Administrative Settlement Agreement and Order on Consent for Removal Action, VW-08-C-884.

To confirm, this payment is being made by Delphi Corporation, 5825 Delphi Drive, Troy, MI 48038 in reference to the aforementioned site: Delphi VOC Plume Site, OH, Site No. B5KG. Unfortunately, it was not possible to complete an Electronics Funds transfer.

I trust everything is in order. Please do not hesitate to contact me if you have any questions regarding this matter.

Sincerely yours,



Jim Hunt
Manager, Global Remediation Services (GRS)
Operations Support Group (OSG)
Delphi Corporation, World & North American Headquarters
5725 Delphi Drive, Mail Code: 480-410-186,
Troy, Michigan USA 48098-2815
Phone: +1 248.813.1428, Fax +1 248.813.1599
Mobile: +1 248.953.1173, james.hunt@delphi.com

cc: M. Gonzalez, US PEA (via email)
S. Renninger, US EPA (via email)
R. Hackley, US EPA (via email)
L. Haile, US EPA (via email)

G. Howarth, Delphi (via email)
M. Hester, Delphi (via email)
J. Ridd, Delphi (via email)

DELPHI
P.O. Box 972930
El Paso, TX 79997-2930

DEBTOR-IN-POSSESSION

PAGE: 1 of 1

DATE: April 23, 2009
TRACE NUMBER: 14102000250007
CHECK NUMBER: 0900760404
AMOUNT PAID: \$115,451.61
U.S. DOLLARS

DELPHI

00004 CKS 6A 09112 - 0900760404 NNNN 1125100005006 X34AA1 C
ENVIRONMENTAL PROTECTION AGENCY
77 W JACKSON BLVD STE 442
CHICAGO IL 60604-3509



SUPPLIER NO: 00083866512

INVOICE DATE	INVOICE NUMBER	BOL DESCRIPTION	P.O. REF	INVOICE AMOUNT	DISCOUNT AMOUNT	NET AMOUNT
04/16/09	1900142222	AOSG-001 EW AOSG-001 TOTALS	N/A	\$115,451.61 \$115,451.61	\$0.00 \$0.00	\$115,451.61 \$115,451.61

Part level line item detail is attainable from Covisint Web application by registering through Delphi's
Supplier Portal <https://portal.covisint.com/portal/> and requesting the Delphi ePayments application.

DELPHI VOC Plume Site, OH
Account No. (27509265041)
Site No. B5KG

PLEASE DETACH BEFORE DEPOSITING CHECK

DELPHI
P.O. Box 972930
El Paso, TX 79997-2930

CHECK
NUMBER 0900760404

50-937
213

April 23, 2009

*** VOID AFTER 180 DAYS ***

DEBTOR-IN-POSSESSION

PAY **ENVIRONMENTAL PROTECTION AGENCY**
TO THE
ORDER OF:

CHECK AMOUNT

\$115,451.61

PAY IN U.S. DOLLARS

EXACTLY *****115,451 DOLLARS AND 61 CENTS

JPMorgan Chase Bank, N.A.
Syracuse, NY



John P. Pink
Authorized Signature

0900760404 021309379

6012504421

October 27, 2009

Mr. Steve Renninger, On-Scene Coordinator
U.S. EPA Region 5
Emergency Response Branch
26 West Martin Luther King Drive (G41)
Cincinnati, OH 45268

Re: Delphi VOC Plume Site
Administrative Settlement Agreement
and Order on Consent for Removal Action
Docket No. V-W-'08-C-884

Dear Mr. Renninger:

Delphi underwent reorganization on October 6, 2009, resulting in a name change from "Delphi Corporation" to "DPH Holdings Corporation". This transaction will not impact ownership or operational control of the facility and is not expected to have any immediate material change in the day-to-day operations.

Thank you for your attention to this matter. Please contact me at the number below if you have any questions or concerns.

Sincerely,



W. John Ridd
Project Manager
for DPH Holdings Corporation
(937) 356-2445

Cc: Susan Hoertt, Haley & Aldrich, Inc.
Harold O'Connell, Ohio EPA SWDO
Robert Frey, Ohio Department of Health
Mark Case, Public Health-Dayton & Montgomery County

DELPHI

May 23, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Emergency Response Branch Command Post
919 N. Keowee Street
Dayton, OH 45404

Re: Delphi Home Avenue VOC Plume Site
Phase II Work Plan Addendum

Dear Mr. Renninger:

Pursuant to our discussions during our face-to-face meeting on April 24, 2008 and subsequent discussions during Delphi Home Avenue VOC Plume Site Technical Committee meetings (May 1, 2008 and May 8, 2008), Delphi will add one property to the approved Phase II study area. In accordance with the approved Phase II Work Plan, Delphi must obtain written permission from the owner of this property prior to performing any sampling activities. If written permission to sample is obtained from the property owner, Delphi will collect samples in accordance with the approved Phase II Work Plan.

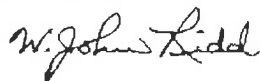
Additionally, as agreed between U.S. EPA and Delphi, a sub-slab soil vapor sample has been collected from each of two selected structures located in the approved Phase II study area and included in the City of Dayton's Nuisance Abatement program. Due to the dilapidated condition of these structures, with doors and windows broken or missing, no indoor air samples were collected.

Delphi understands that U.S. EPA will accept the data collected from the two nuisance structures and the newly added property in determining the extent of impact in the study area.

In accordance with Section VIII of the Administrative Order on Consent, Delphi is requesting your approval of this Phase II Work Plan Addendum.

Please contact me if you have any questions concerning the enclosed materials.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosures

Table 1 - Phase II Property Addresses, Addendum

c: Susan Hoertt, Haley & Aldrich, Inc.

TABLE 1
 PHASE II INDOOR AIR SAMPLING MITIGATION
 PROPERTY ADDRESSES
 DELPHI VOC PLUME SITE
 ADDENDUM

Street Number	Street Name	Description of Residential Structure	Comments
E...	Ex. 6 P... ..	Single family structure	
E...	Ex. 6 P... N...	Single family structure	
E...	Ex. 6 P... ..	Single family structure	
E...	Ex. 6 - 1...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... ..	Single family structure	
E...	Ex. 6 P... ..	Single family structure	
E...	Ex. 6 P... ..	Single family structure	
E...	Ex. 6 P... ..	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... ..	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... ..	Single family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... ..	Single family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, A...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	Structure appears to be uninhabitable
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, A...	Single family structure	Attempts to gain permission to sample were initiated in Phase I
Ex. ...	Ex. 6 P... Names, ...	Two-family structure	
E...	Ex. 6 P... Names, ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
Ex. 6...	Ex. 6 P... Names, ...	Two-family structure	Attempts to gain permission to sample were initiated in Phase I
E...	Ex. 6 P... Names, ...	Single family structure	City of Dayton Department of Housing has placed structure in the Nuisance Abatement Program
E...	Ex. 6 P... Names, ...	Single family structure	Structure appears to be uninhabitable
Ex....	Ex. 6 P... Names, ...	Single family structure	
Ex....	Ex. 6 P... Names, ...	Single family structure	
Ex....	Ex. 6 P... Names, ...	Single family structure	
Ex. ...	Ex. 6 P... Names, ...	Single family structure	
Ex....	Ex. 6 P... Names, A...	Single family structure	
Ex....	Ex. 6 P... Names, ...	Single family structure	
E...	Ex. 6 P... Names, ...	Single family structure	

DELPHI

June 19, 2008

Mr. Steve Renninger
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
Emergency Response Branch Command Post
919 N. Keowee Street
Dayton, OH 45404

Re: Delphi VOC Plume Site – Notice of Completion of Phase I Quarterly Monitoring at Ex. 6 - 1...
Ex. 6 Priv... Names, Addresses and phone numbers redacted

Dear Mr. Renninger:

Delphi has completed Phase I quarterly monitoring at three of five structures identified in the U.S. EPA-approved Phase I Work Plan for Indoor Air Sampling and Mitigation. Delphi is requesting U.S. EPA's concurrence that no further action is warranted at these locations.

In accordance with the Phase I Work Plan, Delphi has performed quarterly monitoring at residential structures located at the following addresses in Dayton, Ohio:

Ex. 6 P... Names, Addresses a...

Ex. 6 P... Names, Addresses and phone nu...

Ex. 6 P... Names, Addresses and phone numb...

Pursuant to Section 3.0 of the USEPA-Approved Phase I Work Plan, quarterly monitoring is complete when four consecutive quarterly sampling events demonstrate no exceedances of the Ohio Department of Health's (ODH) recommended screening level for chloroform, TCE or PCE in indoor air. Laboratory analytical data from the Phase I quarterly sampling at the three locations listed above demonstrates that indoor air did not exceed the ODH screening levels for the three constituents of concern. A summary of the data is presented in Table 1.

Delphi appreciates U.S. EPA's consideration of this request for concurrence of no further action. Please contact me if you have any questions concerning the enclosed materials.

Sincerely,



W. John Ridd
Project Manager
Delphi

Enclosure

cc: Susan Hoertt, Haley & Aldrich, Inc.
Mark Case, Public Health – Dayton & Montgomery County
Robert Frey, Ohio Department of Health

TABLE 1
PHASE I QUARTERLY MONITORING RESULTS
DELPHI VOC PLUME SITE
NOTICE OF COMPLETION

71 S. Ardmore Ave.			Indoor Air Results (ppbv) ¹			Sub-Slab Soil Vapor Results (ppbv)		
Sample Date			Chloroform	TCE	PCE	Chloroform	TCE	PCE
Q1	5/2/2007		0.43	0.23	ND ² (0.14) ³	220	200	2.1
Q2	11/28/2007		ND (0.14)	ND (0.13)	ND (0.10)	16	25	5
Q3	2/12/2008		0.97	ND (0.13)	ND (0.11)	1.7	3.4	0.57
Q4	5/21/2008		ND (0.29)	ND (0.26)	ND (0.21)	ND (0.28)	ND (0.25)	ND (0.20)

117 S. Ardmore Ave.			Indoor Air Results (ppbv)			Sub-Slab Soil Vapor Results (ppbv)		
Sample Date			Chloroform	TCE	PCE	Chloroform	TCE	PCE
Q1	4/25/2007		ND (0.16)	ND (0.14)	0.32	ND (4.9)	74	65
Q2	11/21/2007		ND (0.16)	ND (0.15)	0.42	1.6	42	21
Q3	2/12/2008		ND (0.12)	ND (0.11)	ND (0.086)	Lab reported failed vacuum in Summa canister - sample not analyzed. U.S. EPA agreed repeat of sampling event was not required if indoor air results were below ODH screening levels.		
Q4	5/21/2008		ND (0.15)	ND (0.13)	ND (0.10)	1.8	39	18

55/57 Bish Ave.								
Sample Date			Indoor Air Results (ppbv)			Sub-Slab Soil Vapor Results (ppbv)		
			Chloroform	TCE	PCE	Chloroform	TCE	PCE
Q1	5/3/2007	Ex. 6 P... ..	ND (0.15)	ND (0.14)	ND (0.11)	0.24	11	ND (0.11)
		Ex. 6 P... ..	ND (0.16)	ND (0.15)	ND (0.12)			
		Q2	11/21/2007	Ex. 6 P... ..	ND (0.16)	0.15	ND (0.11)	21
Ex. 6 P... ..	ND (0.16)			ND (0.15)	ND (0.12)			
Q3	3/10/2008			Ex. 6 P... ..	Sampling in Unit 55 prohibited by property owner. U.S. EPA agreed repeat of sampling event was not required if indoor air results of 57 Bish Avenue were below ODH screening levels.			Sub-slab sampling point for structure located in 55 Bish Avenue. Sampling in Unit 55 prohibited by property owner. U.S. EPA agreed repeat of sampling event was not required if indoor air results of 57 Bish Avenue were below ODH screening levels.
		Ex. 6 P... ..	ND (0.14)	ND (0.12)	ND (0.098)			
		Ex. 6 P... ..	ND (0.15)	ND (0.13)	ND (0.11)			
Q4	5/21/2008	Ex. 6 - 1...	ND (0.14)	ND (0.12)	ND (0.098)	5.3	8.2	ND (0.099)
		Ex. 6 P... ..	ND (0.15)	ND (0.13)	ND (0.11)			

ODH-Recommended Screening Criteria	Indoor Air (ppbv)			Sub-Slab Soil Vapor (ppbv)		
	Chloroform	TCE	PCE	Chloroform	TCE	PCE
	2.2	0.4	12	22	4	120

Notes:

- 1 ppbv - parts per billion by volume of air
- 2 ND - not detected at or above the laboratory's minimum reporting limit
- 3 (0.15) - number in parenthesis indicates laboratory's method reporting limit

DELPHI

Date: July 14, 2009

To: Chris Korleski
Director
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH

Subject: Proposed Director's Final Findings and Orders
Delphi Corporation dba Delphi AHG Home Avenue

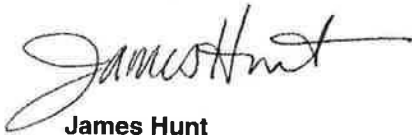
Dear Mr. Korleski,

We are in receipt of your May 19, 2009 letter forwarding the *Proposed Director's Final Findings and Orders* for the Delphi Corporation dba Delphi AHG Home Avenue (Delphi) facility located at 2701 Home Avenue in Dayton, OH.

Delphi will continue to review the document and prepare to respond. However, please note that due to demands associated with the company's expected near-term emergence from bankruptcy, Delphi likely will be unable to provide a formal response until late summer.

Thank you in advance for your patience regarding this matter.

Sincerely,



James Hunt
Manager, Global Remediation Services (GRS)

cc. Michael Savage – Chief, Division of Hazardous Waste Management, OEPA
Tom Winston – District Chief, OEPA
Elissa Miller – Legal Services, OEPA
H. O'Connell - OEPA
M. Hester – Delphi Legal
J. Ridd – Delphi OSG
G. Howarth – Delphi OSG

DPH Holdings Corporation

November 10, 2009

Mr. Steve Renninger, On-Scene Coordinator
U.S. EPA Region 5
Emergency Response Branch
26 West Martin Luther King Drive (G41)
Cincinnati, Ohio 45268

Subject: Request to Reduce Financial Assurance for the Delphi VOC Plume Site

Dear Mr. Renninger:

In accordance with Item 73 of Section XXVII of the Administrative Settlement Agreement and Order on Consent ("Order") between U.S. EPA and Delphi Corporation (now "DPH Holdings Corporation"), effective November 6, 2007, DPH Holdings Corporation ("DPHH") has maintained financial security in the amount of \$162,410 for the Delphi VOC Plume Site. This level of financial assurance included forecasted costs for the following work:

- Implementation of a soil vapor intrusion investigation to address volatile organic compounds (VOCs) in residential structures in the vicinity of the Delphi Home Avenue facility,
- Quarterly indoor air monitoring in structures where VOCs detected in sub-slab soil vapor exceeded the Ohio Department of Health recommended screening levels,
- Installation of soil vapor mitigation systems in structures where VOCs detected in indoor air exceeded the ODH recommended screening levels, and
- Mitigation performance monitoring at 30-, 60-, 180- and 360-day intervals at those structures.

DPHH has successfully completed these tasks and has commenced a program of annual mitigation performance monitoring at the seven structures in which the mitigation systems are installed. As such, DPHH believes this is an appropriate time to re-evaluate the amount of financial security pertinent for the remaining work for the Site.

DPHH estimates the costs for implementation of annual mitigation performance monitoring at seven structures to be \$46,200 and proposes maintaining financial security in that amount. The basis for this level of financial assurance is presented in the attached cost estimate table and assumes annual mitigation performance monitoring at the seven structures in February 2010 and February 2011, and implementation of the mitigation completion program beginning in February 2012 with quarterly monitoring at the seven structures for four consecutive quarters, consistent with U.S. EPA-approved Phase I and Phase II Work Plans for Indoor Air Sampling and Mitigation.

**DELPHI VOC PLUME SITE
FINANCIAL ASSURANCE COST ESTIMATE
10-Nov-09**

TASK DESCRIPTION ¹	LABOR			EXPENSES			SUBCONTRACTOR COSTS		
	Avg. Labor Hours per Structure	Avg. Labor Hrs. per Event ²	Labor Subtotal per Event @ \$64/hour	Materials & Equipment Costs per Event ³	Travel per Event	Expenses Subtotal per Event	No. Samples per Event ⁴	Analytical Costs per Sample ⁵	Analytical Subtotal per Event
Subtotals per Event:									
2nd - 4th Annual Mitigation Performance Monitoring Events - February 2010 - November 2012	4.5	31.5	\$2,016	\$135	\$29	\$164	20	\$276	\$5,520
Total Costs for 6 Events:			\$12,096			\$984			\$33,120
									\$46,200

Notes:

1. Assumes 6 sampling events: 2 annual (February 2010, February 2011), and 4 quarterly sampling events in 2012

Event	Date
2nd Annual Event	Feb 2010
3rd Annual Event	Feb 2011
4th Annual Event/Initiation of Completion Monitoring	Feb 2012
	May 2012
	Aug 2012
	Nov 2012
	Total No. Events
	6

2. Based on 7 structures to be sampled per event.

3. Cost estimates for sample tubing, digital manometer, PID, and sample shipment.

4. Number of samples per event assumes seven structures to be sampled during each event as follows:

Structure	No. Indoor Air Samples per Event	No. Sub-slab Soil Vapor Samples per Event
55 S. Ardmore	1	1
59 S. Ardmore	1	1
61, 63A, 63B S. Ardmore	3	3
75 S. Ardmore	1	1
81, 83, 85 S. Ardmore	3	1
110 S. Ardmore	1	1
113 S. Ardmore	1	1
	Total No. Samples	20

5. Cost estimates for sampling canisters and equipment, analysis and data packages.

Kirkland, Randy

From: Hoertt, Susan [SHoertt@haleyaldrich.com]
Sent: Monday, February 15, 2010 11:37 AM
To: 'Steve Renninger'
Cc: Kirkland, Randy; Ridd, John ; bethany.dale@etc-online.com; Barnett, Corey
Subject: RE: Home Avenue VOC Plume Site Annual Mitigation Monitoring Event - February 16-17, 2010.
Attachments: 2010-0208_26708_AnnualMitMonitoring_DPHHVOCPlumeSite_Rev2 15 10.pdf

Steve,

Despite repeated attempts, we have not been able to schedule a sampling appointment with the occupant of Ex. 6 ...
Ex. 6 P... Names, Adresse... A summary of our outreach efforts is included in the attached sampling event schedule.

The sampling team will be prepared to conduct sampling at Ex. 6 P... Names, A... in the event we can make direct contact during our field work Tuesday and Wednesday, Feb. 16-17, 2010. All other annual mitigation performance monitoring appointments have been re-confirmed with the owners and/or occupants and will proceed as scheduled.

Please contact me if you have any questions.

Thank you.

Susan Hoertt, R.S., CPEA
Senior Scientist

Haley & Aldrich
8899 Gander Creek Drive
Miamisburg, OH 45342-5432
+1 937.530.1408 Office
+1 937.620.3799 Cellular
+1 937.530.1458 Fax
SHoertt@HaleyAldrich.com
HaleyAldrich.com

From: Hoertt, Susan
Sent: Monday, February 08, 2010 11:15 PM
To: 'Steve Renninger'
Cc: 'randy.kirkland@westonsolutions.com'; 'Ridd, John '; bethany.dale@etc-online.com; Barnett, Corey
Subject: Home Avenue VOC Plume Site Annual Mitigation Monitoring Event - February 16-17, 2010.

Attached is the current schedule for performance of the Home Avenue VOC Plume Site annual mitigation monitoring event. We have appointments to inspect the SSD systems and collect samples (indoor air and soil vapor) at five (5) of the (6) properties in the annual mitigation monitoring program. The event will be conducted over a two-day period, February 16 and 17, 2010. The SSD systems will be inspected and the sample canisters set up on Tuesday, Feb. 16. The canisters will be retrieved on Wednesday, Feb. 17.

We have not been able to reach the occupants of Ex. 6 P... Names, Addresses and ph... We will try again later this week and will inform you of the results of our on-going efforts. Meanwhile, the sampling team will be prepared to perform mitigation monitoring at Ex. 6 P... Names, Addresses and p... should the occupant be reached while the team is in the field performing the mitigation monitoring events at the other five structures.

Please contact John Ridd or me if you have any questions.

Thank you.

Susan Hoertt, R.S., CPEA
Senior Scientist

Haley & Aldrich

8899 Gander Creek Drive
Miamisburg, OH 45342-5432

+1 937.530.1408 Office

+1 937.620.3799 Cellular

+1 937.530.1458 Fax

SHoertt@HaleyAldrich.com

HaleyAldrich.com

DPH Holdings
Home Avenue VOC Plume Site
Annual Mitigation Monitoring Schedule

February 16-17, 2010				
Time	Address	Contact Name	Comments	Samples to be collected
8:30 AM	Ex. 6 P... Names, Addresses and p...	Ex. 6 P... Names, ...	Owner will meet sampling team for appointments and will provide access. Unit 61 is still vacant, but will be sampled.	61 - indoor air (IA), sub-slab soil vapor (SS)
				63A - IA, SS
				63B - IA, SS
9:30 AM	Ex. 6 P... Names, Address...	Ex. 6 P... Names, Ad...		IA, SS
10:30 AM	Ex. 6 P... Names, Address...	Ex. 6 P... Names...	Ex. 6 P... N... phone is disconnected. His neighbor Ex. 6 P... Na... said she talked to Ex. 6 P... N... and he asked for the 10:30 appt. time. His girlfriend will be home to provide the team access. 2/15/10 Update - Phone no longer disconnected.	IA, SS (from beneath vapor barrier)
11:30 AM	Ex. 6 P... Names, Add...	Ex. 6 P... Names, ...		IA, SS
1:30 PM	Ex. 6 P... Names, Address...	Ex. 6 P... Name...		IA, SS
TBD	Ex. 6 P... Names, Address...	Ex. 6 P... Names, A...	<p>2/02/10-Person who answered phone said Ex. 6 P... wasn't there and then hung up.</p> <p>2/04/10-Left message on voice mail/answering machine.</p> <p>2/08/10-Left another message on answering machine. Talked with Ex. 6 P... Names, A... tenant's sister and owner. Conveyed that we are trying to get in touch with Ex. 6 P... Nam... regarding annual monitoring event.</p> <p>2/11/10 - Door Hanger given to man who answered door. Message conveyed to have Ex. 6 P... Name... contact the Information Line to schedule testing appt. 2/15/10 - Left message with young child to have Ex. 6 P... N... call the Information Line.</p>	IA, SS